Speedict eBike Android Client

by Speedict Technology

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Table of Content

Introduction ____ p 01

Android Bluetooth Pairing ____ p 01

Live View ____ p 03

New Session ____ p 06

Map View ____ p 07

Options - Voltage Alert Setting ____ p 09

Options - eBike Setting ____ p 10

Options - System Setting ____ p 11

Trip Record(s) ____ p 12

Device Connect ____ p 16

Synchronize eBike ____ p 17

Erase eBike Device Records ____ p 18

Battery Analytics ____ p 19

Trip and Per-charge info field ____ p 27

Function Mode ____ p 29

Function Mode Matrix ____ p 29

I/O Port Location ____ p 30

Signal Cables ____ p 31

Signal Cables Pin Assignment ____ p 31

Sensors And Components ____ p 32

Multi Sense Mode ____ p 32

Simply Cut Mode ____ p 34

PAS Mode ____ p 36

Throttle Mode ____ p 38

PAS To Throttle Mode ____ p 40

Road Legal 1 Mode ____ p 42

Road Legal 2 Mode ____ p 44

Select Function Mode via Android Client ____ p 46

Governor ____ p 59

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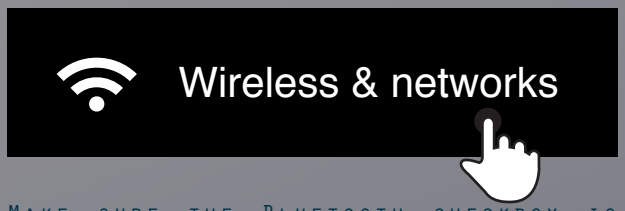
Introduction

Android Client 2.x from Speedict Technology by using Android smart device to Live View streamed eBike Voltage, Current, Power, Capacity, Speed and GPS data wirelessly via Bluetooth protocol. by download / synchronize Trip Record(s) to Android smart device, Offline Trip Record(s) can be reviewed at anytime anywhere without need of PC and USB, offline data also provide essential information for battery analytics by comparing battery performances or delivered powers after several battery charge cycles.
Apart from record management, Android Client 2.x also provide remote device setting allows Odometer and total accumulated data can be reseted, correct tire circumference for accurate speed measurement, Speed and Temperature unit setting ...

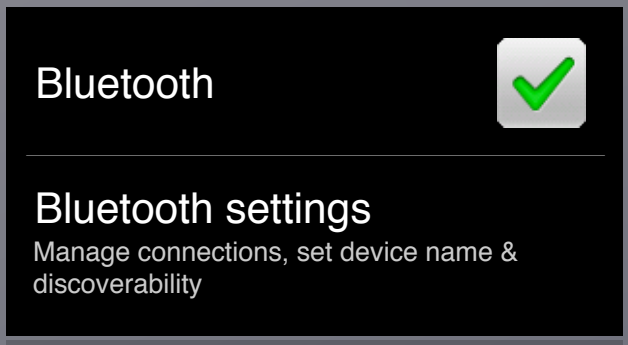
Android Bluetooth Pairing

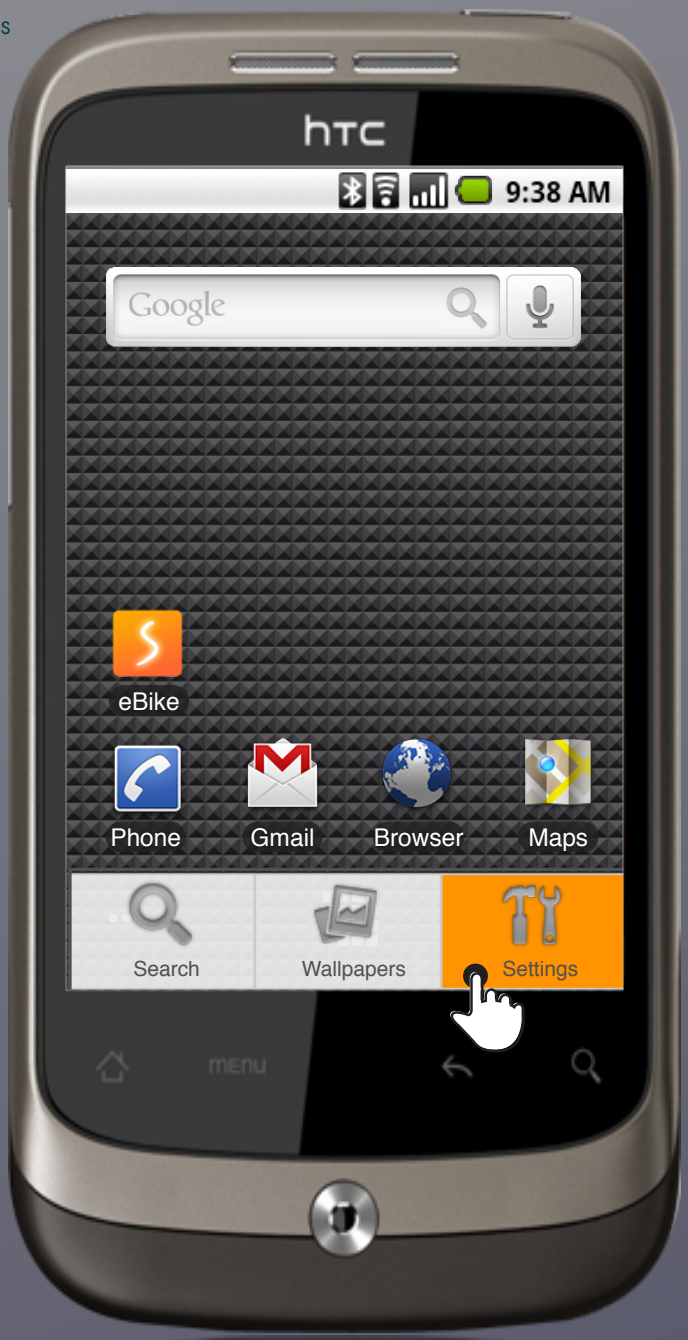
To connect Speedict eBike with Android smart device, Bluetooth protocol is selected, pairing both devices via Android's Wireless & networks settings as below ...

Press menu item settings from Android's main menu, on the menu page, tap on the Wireless & networks item for Bluetooth network setup



Make sure the Bluetooth checkbox is clicked, and tap on the Bluetooth settings item to manage Bluetooth device (Speedict eBike)





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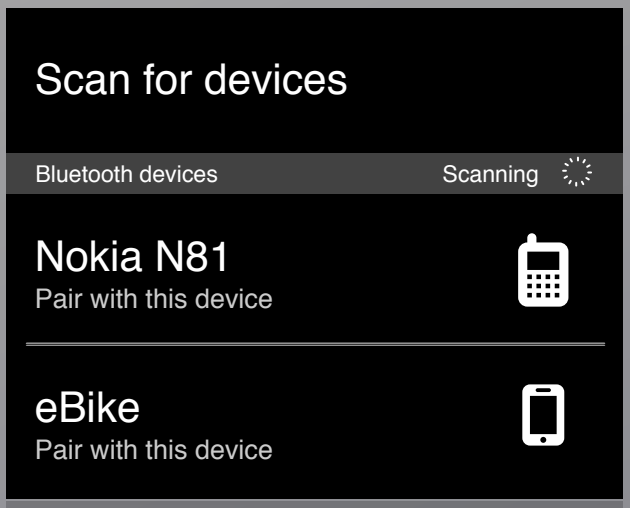
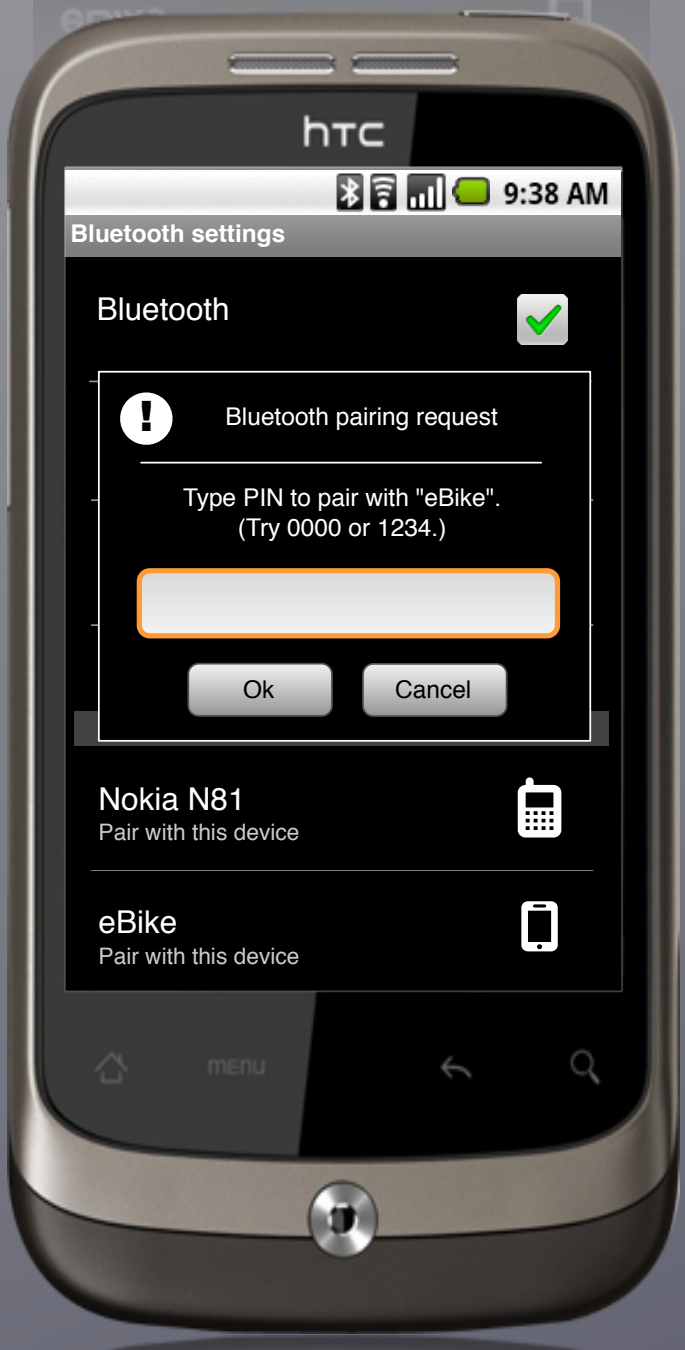
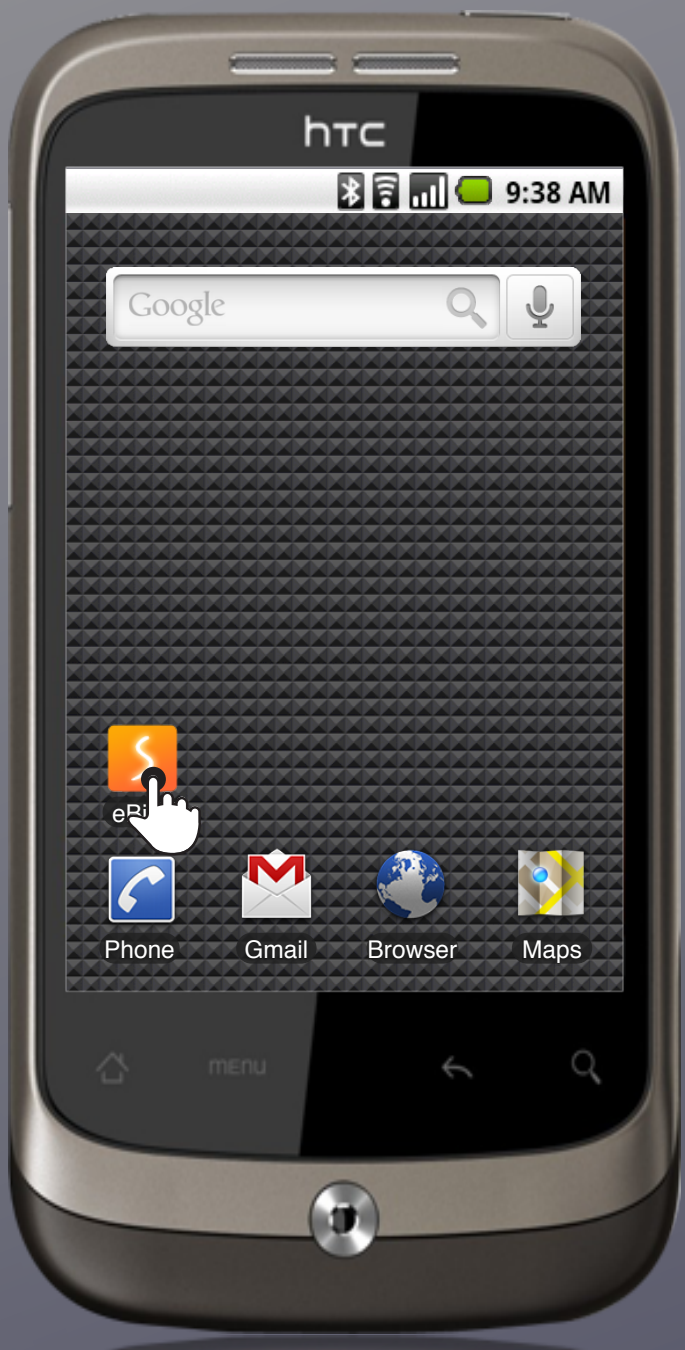


Under Bluetooth devices section, found device will be displayed, when Speedict eBike is powered on, it will be searched and listed there, tap to pair with it ...
Tap to the eBike and ready to pairing ...

Enter the default pin number 00000 for pairing, once it is paired, press the eBike icon from the app page to start Speedict eBike Android Client !





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Live View

Live View feature enable eBike measured and calculated electrical parameters stream and display on Android smart device.
When within range, users can instantly get the critical electrical parameters hassle free using their smart device, when GPS built-in Android smart phone is connected, GPS and map information is also be displayed and recorded.

Tap to Live View menu item from Android Client's main menu.

If Android's Bluetooth device is off or eBike device is absent or out of range, users can access offline data such as downloaded trip record(s) or perform battery analytics ... on the top Android info bar the Speedict icon indicate Android client is on ON or Offline.
For instance, when Live View is requested and Bluetooth is Off, Android client will seek and connect with bond eBike device ...

Color in orange indicate eBike is connected

Color in grey indicate eBike is disconnected, and Android is running on Offline Mode

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Live View with Speed information will immediate display !
Drag and slide on the screen for Elapsed Time, Trip Distance, Current, Voltage, Watt Hour, Power, Temperature and Capacity data show in sequence, or double tap on the screen for display in sequence automatically.

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New Session

At any time during Live View, press the Android menu and select New Session menu item for create new session, when new session is create, eBike will create new record without need to disconnect and reconnect battery.

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Map View

At any time during Live View, press the Android menu and select Map View for map and route display on screen, on the bottom bar sensor Speed, GPS Speed and Altitude will be displayed.

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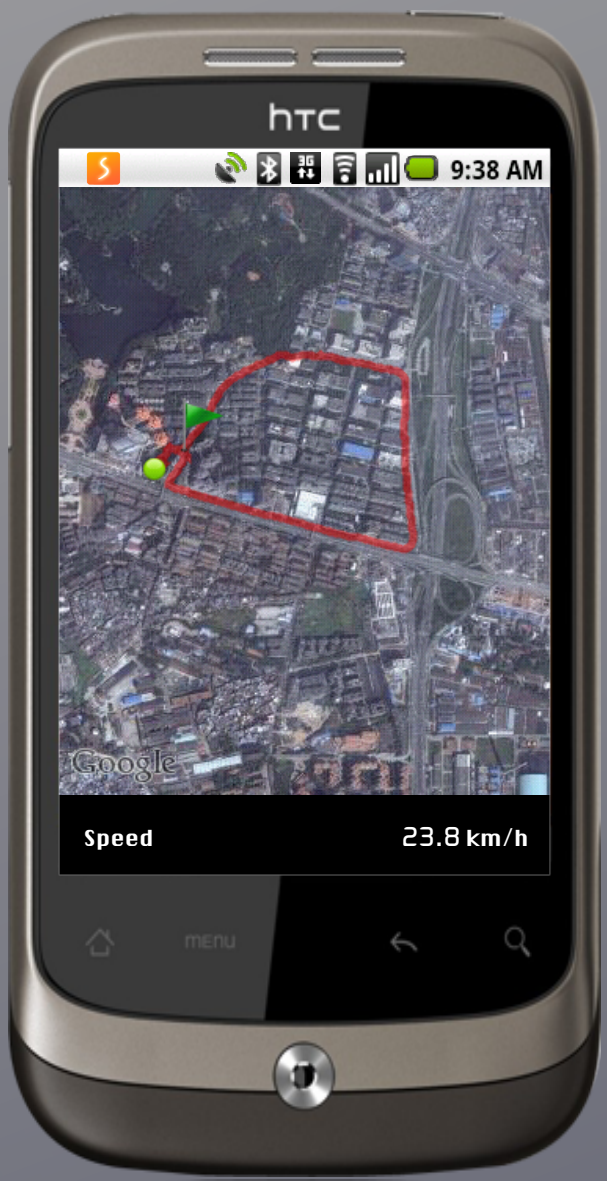
On map view, press the Android menu and select change view menu item to toggle between map and satellite view, or press the data view to exit map view and display live data.



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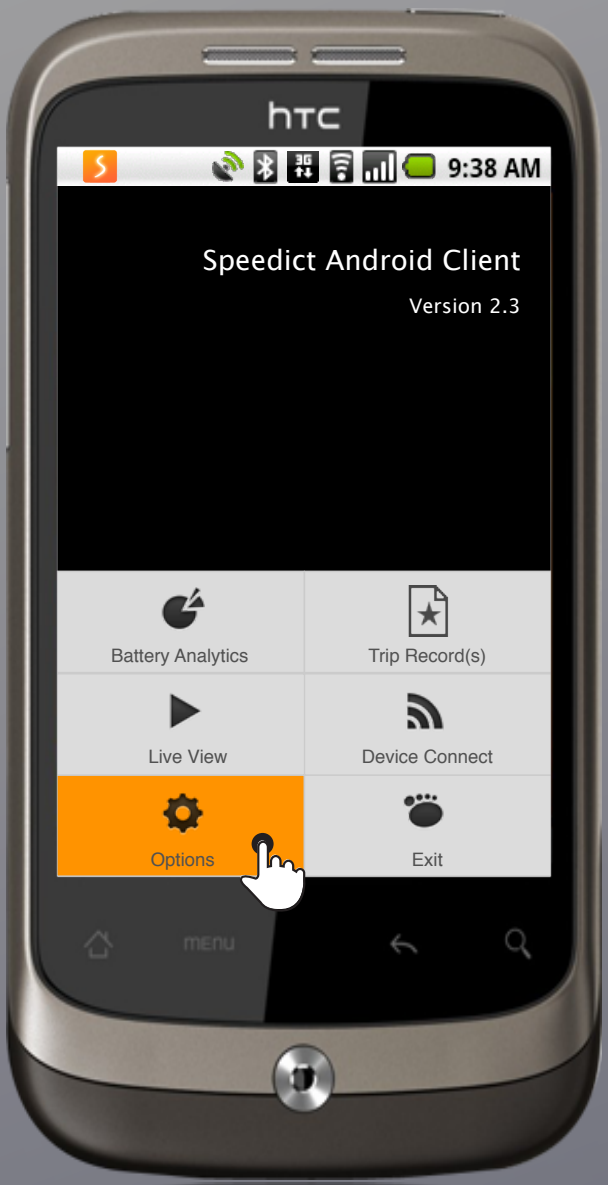
Options

Option module provides all eBike hardware related settings such as Voltage Alert, reset Odometer and Accumulated Ah, Tire Circumference, Speed, Temperature unit, whether connect Bluetooth automatically, or display Live View on start.



Options - Voltage Alert Setting

Voltage Alert feature provides sound or tone alert when preset voltage level is reached, this is especially useful for both battery charging and avoid battery pack is being over discharged.

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E.G. Set 54.60 on "When high than" field for tone alert when battery's voltage reached 54.6V , which is for 13 cell LiPo pack when fully charged where charger or BMS system does not have beep alert feature, set 43.00 on "When lower than" field for tone alert when battery's voltage reached 43V to prevent battery pack over-discharged.

Options - eBike Setting

eBike setting module allows user to reset the Odometer, total accumulated current Ah, set the Tire Circumference for precise speed measurement, set both Speed and Temperature units.

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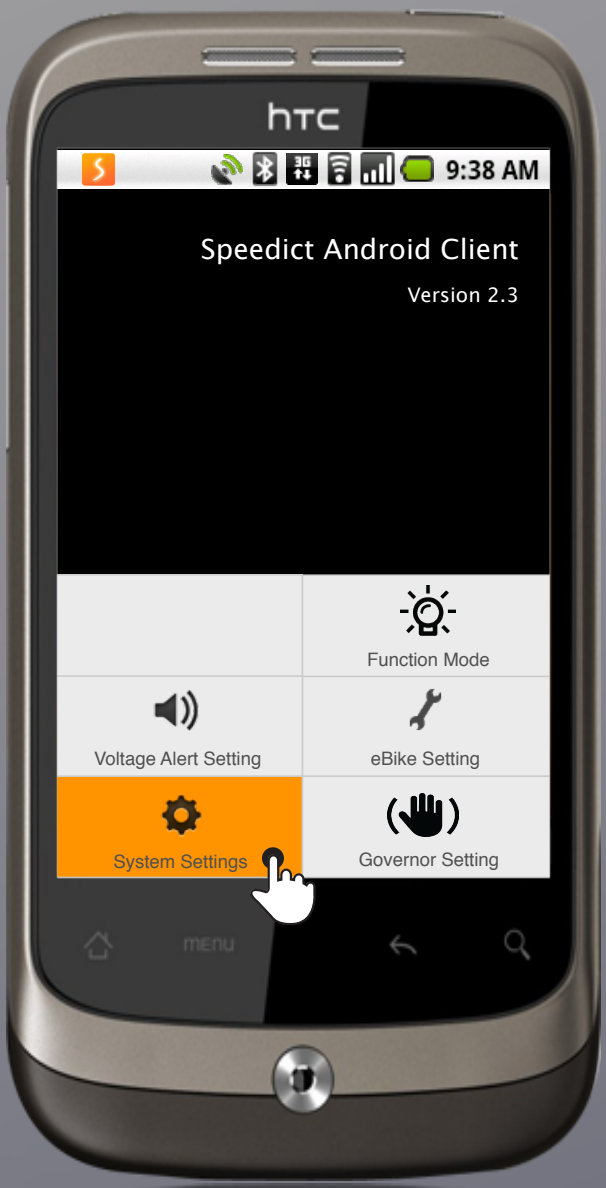
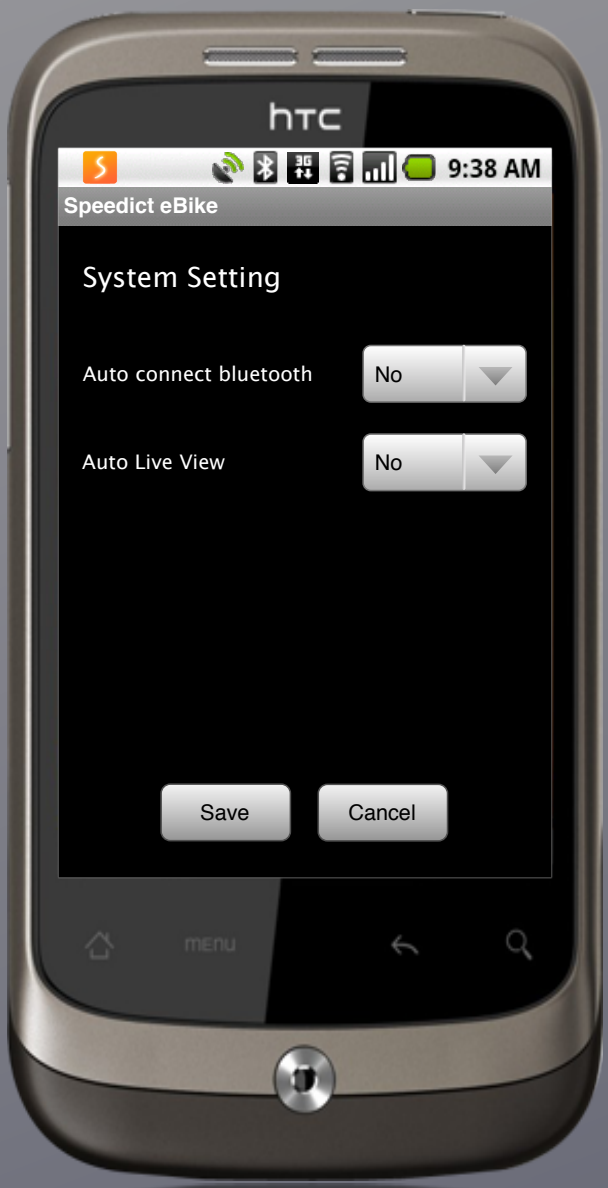
Options - System Setting

This is setting for whether Android client automatic connect Bluetooth device, display live data on program started.





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Trip Record(s)

Trip record feature copy and synchronize eBike device's recorded data to Android Smart device for battery analytics or offline view.

On Trip Record(s) screen, synchronized trip record(s) will be shown according to record date order, press the Android menu button and press the Synchronize Device menu item to start synchronize or copy trip record from eBike device.

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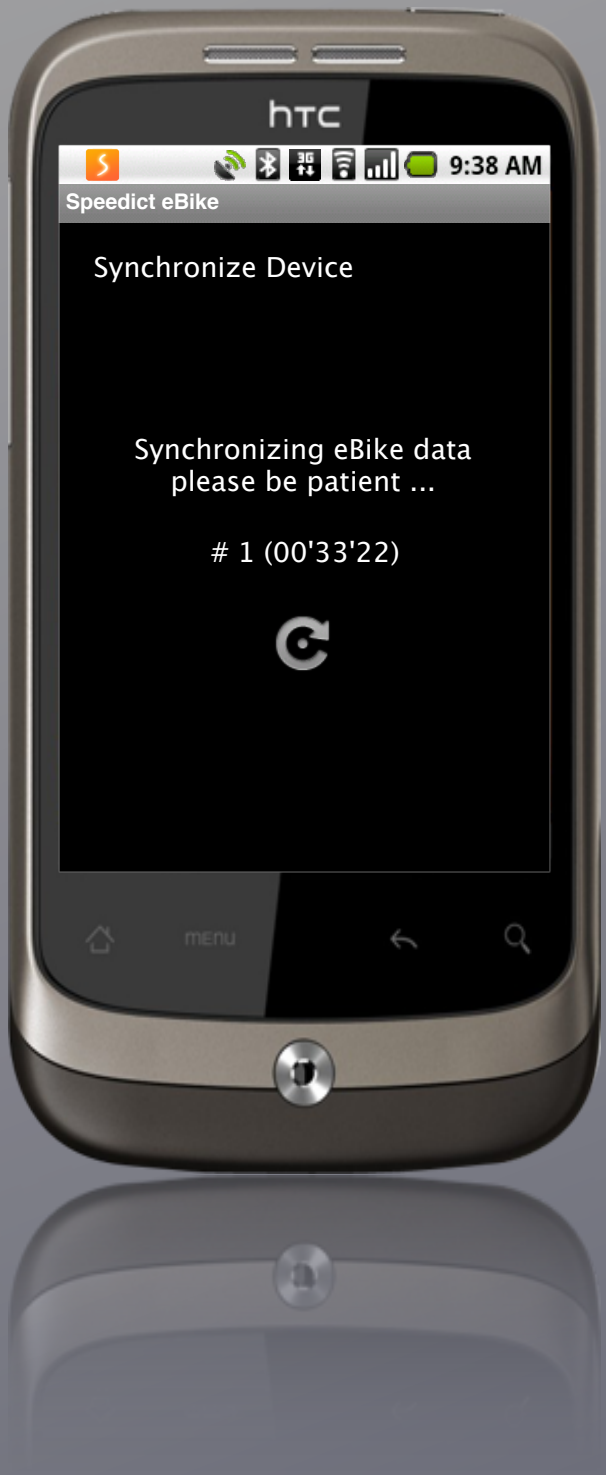
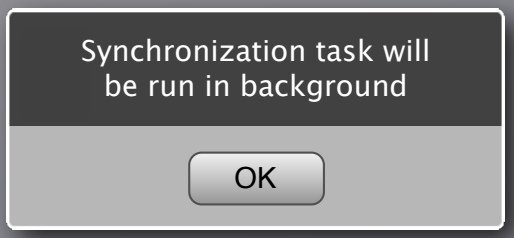
On synchronizing trip record, the total number of trip record and its trip length will be displayed as shown, press the Android Exit menu to send the synchronizing work into background job without users attention.



When synchronize process is completed, press the Android Exit menu to return to Trip Record list.



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Trip Record page displays trip records' in descending order with default Title name, trip record date[1], time and its trip length.

Tap on trip record to display its detail information such as voltage, current, power etc. as shown on right.

[1] on eBike recording trip record with Android phone is presented, phone's date, time and GPS data will be recorded, when phone is absented on recording, trip record will use record synchronize date time as its record time.

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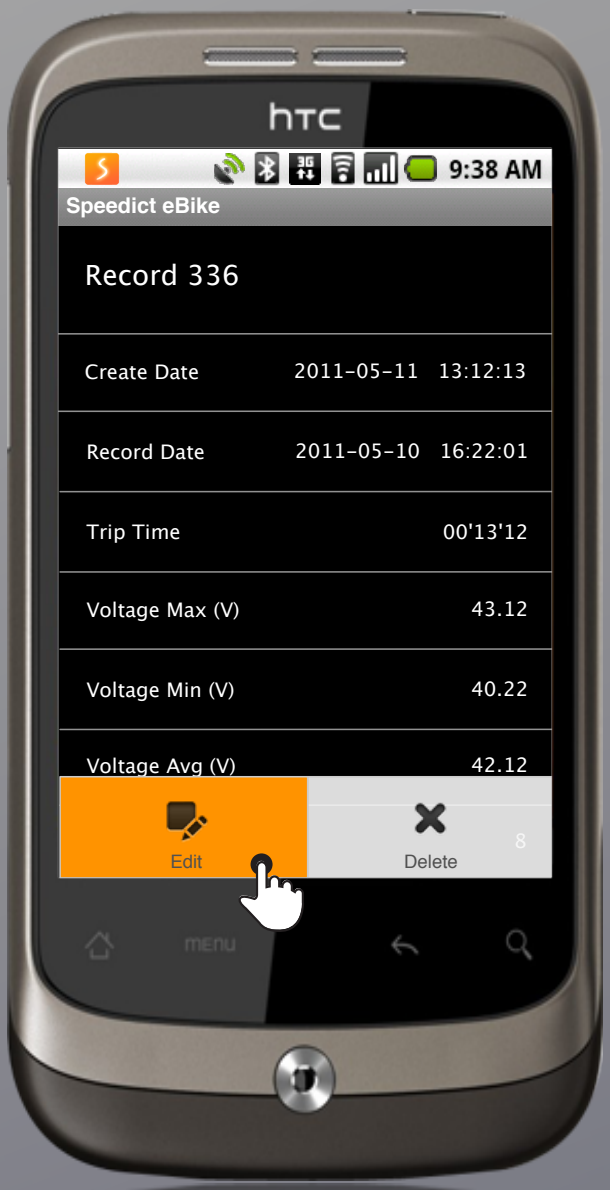
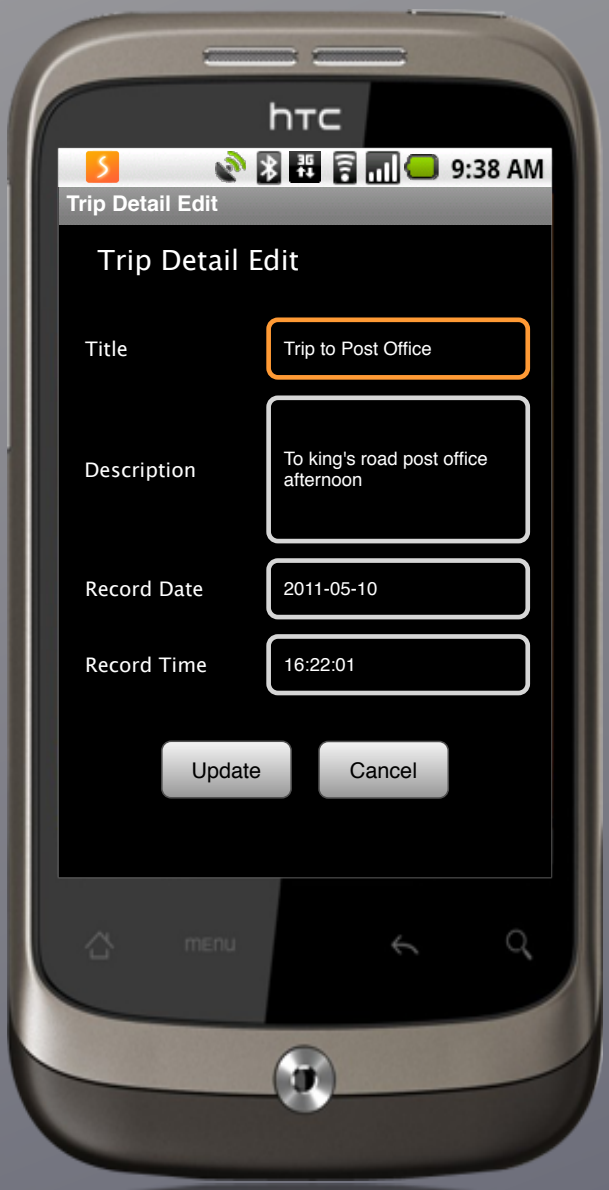
On Trip Record Detail page, tap on the Android menu and Edit menu item to edit trip record's Title, Description, Record Date and Time.





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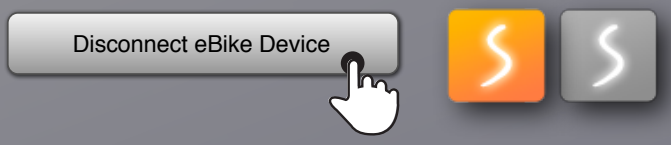
Device Connect

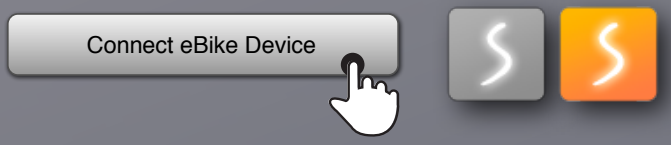
Device Connect module provide tools to manage eBike such as device connect / disconnect, erase data remotely, download data from eBike ...

Connect / Disconnect eBike

When Android Client is connected to eBike via bluetooth protocol, press the Disconnect eBike Device button to disconnect it from eBike, on the other hand when want to connect to eBike device, just simply press the Connect eBike Device button to connect to eBike device via bluetooth ...



Speedict icon located on info bar will change from online to offline to indicate the current status



Speedict icon located on info bar will change from offline to online to indicate the current status

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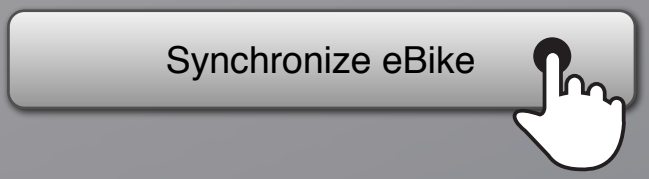
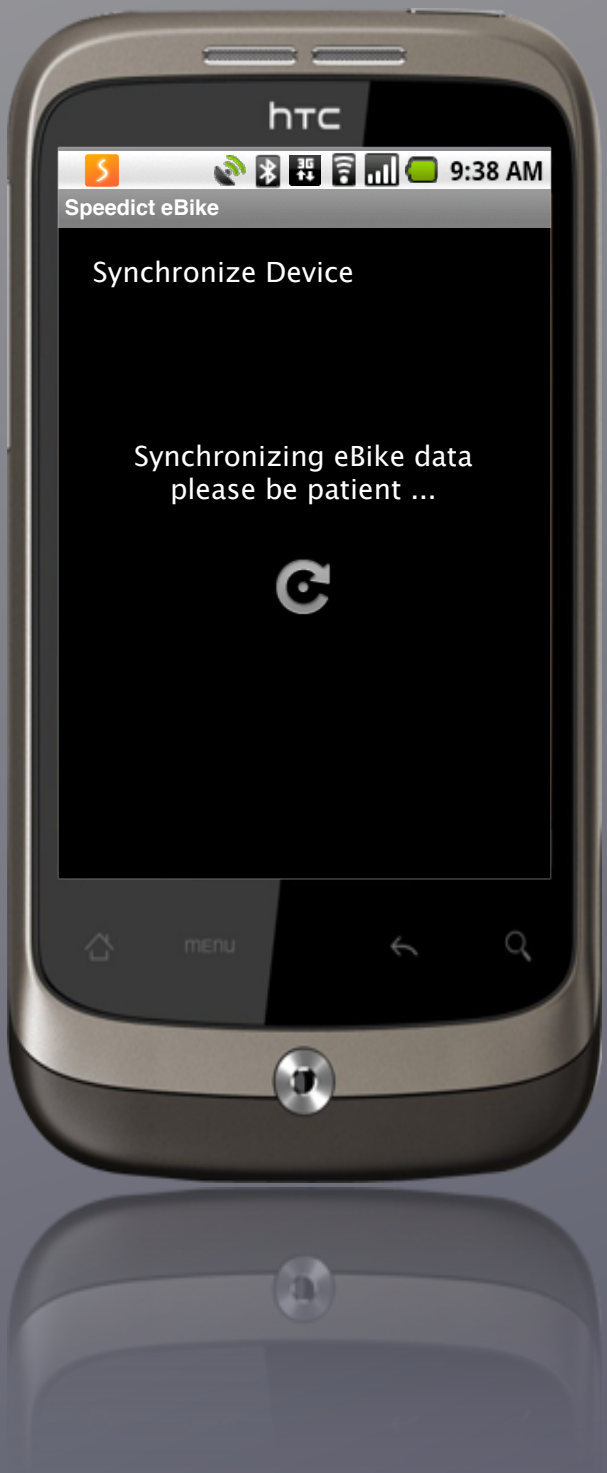
Synchronize eBike

Synchronize feature copy all new or left behind trip record(s) to Android Client for offline use or battery analytics purposes, if eBike trip record(s) has already been copied to Android Client, it will skip from copying to reduce processing time.





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Erase eBike Device Records

When remote data erase is needed, press the Erase eBike Records will erase all left behind trip record(s) within eBike device.

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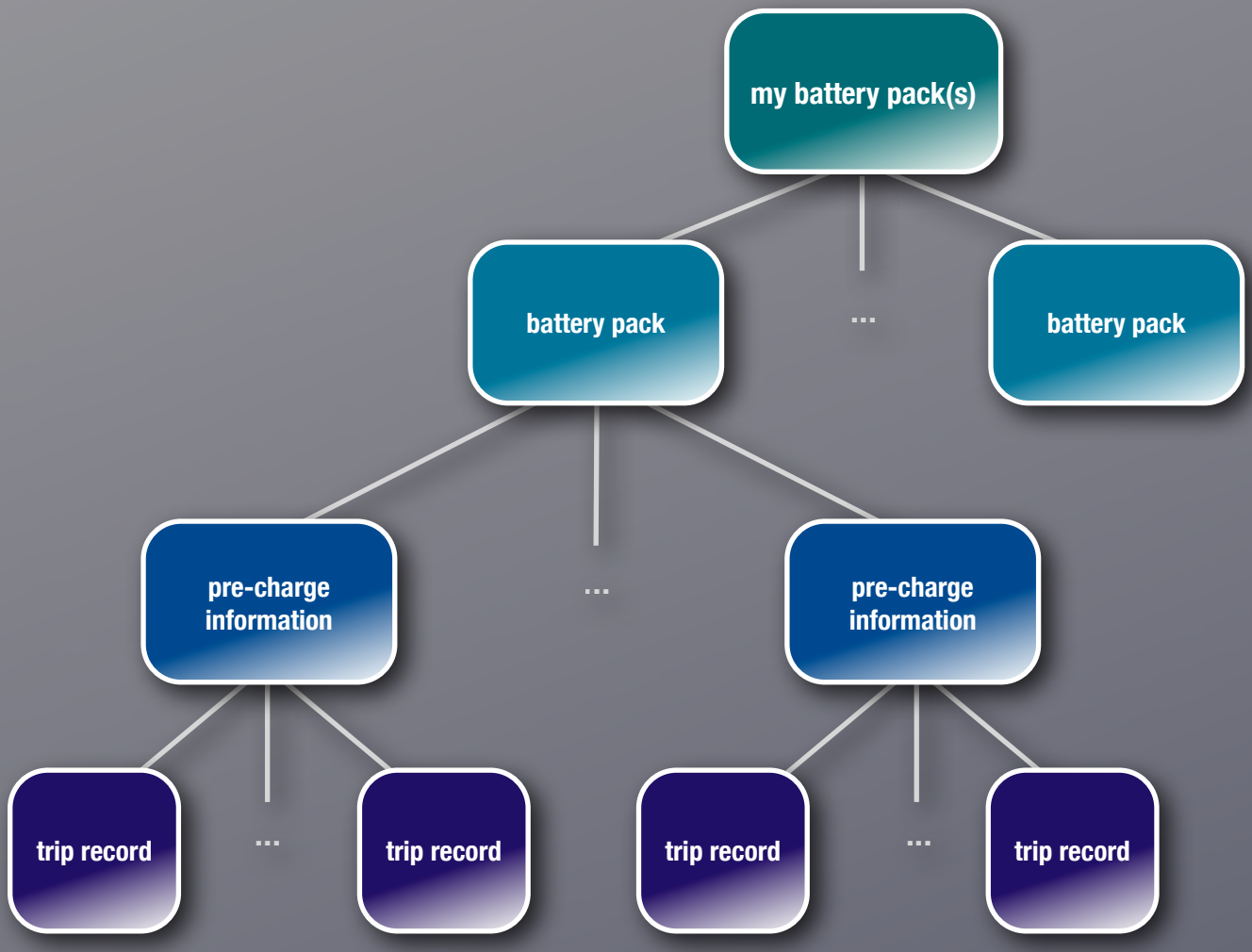
Battery Analytics

Battery Analytics feature provide battery usage summary by consolidate or assign trips record data on charging basis, by comparing each charge history, the batteries' performance and health can be analyzed.
Below hierarchy shown the relationship of battery pack, charge and trip relationship.

E.G. You have 2 battery packs, 36v and 48v packs, before or after you charge up the battery pack, you can create a pre-charge record - "my battery charge time #4", on next battery charge or at any time you can assign its trip record(s) back to each pre-charge record, then you know how battery perform on each charge ... after period of time by comparing charge #1 with #99 you get an idea of the battery's health and performance.



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Press the Battery Analytics menu item from Android Client main menu.

On My Battery Pack(s) page, press the Android menu button to create your first battery pack by press the Add New Battery Pack button.

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Enter battery information such as name, description and its purchase date.

In this example create battery name 36V LifePO4 #1, you can create as many as you can such as 12S LiPo #1 etc.....

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Click to the battery pack name into its Pre-charge History details, on Battery Per-charge History page, click on the Android menu button to add or create battery charge log ...

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Enter battery charge information such as title and description, suggested title name use battery charge number e.g. #01, #02 or week 23 etc., that make it easy for battery health comparison.

In this example use "My first battery charge", click to open it and prepare trip record assignment.

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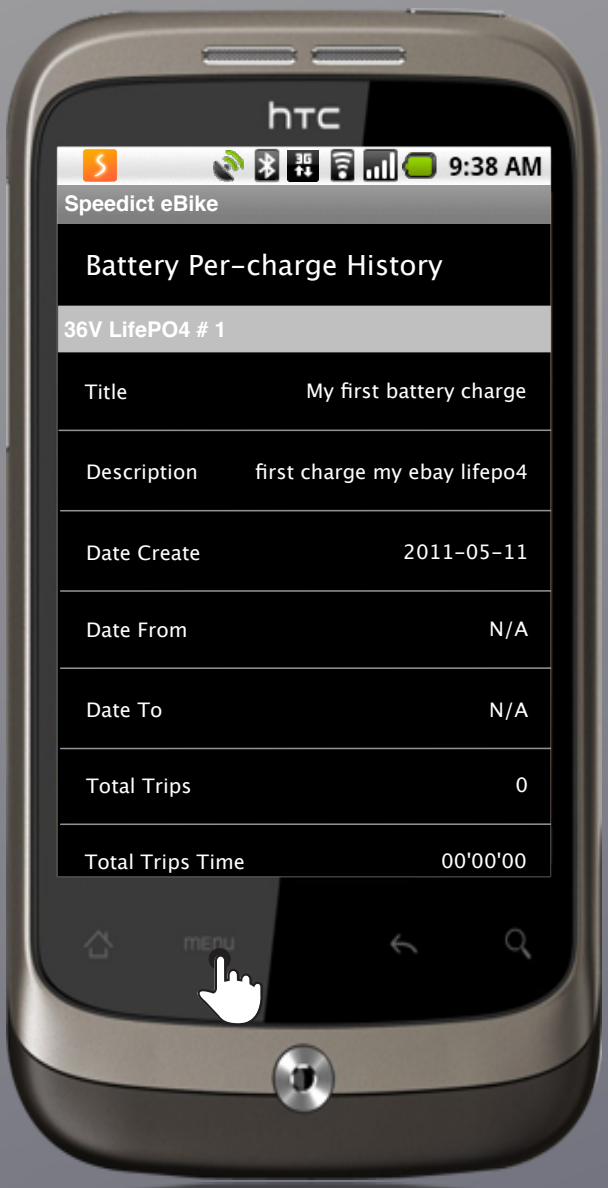
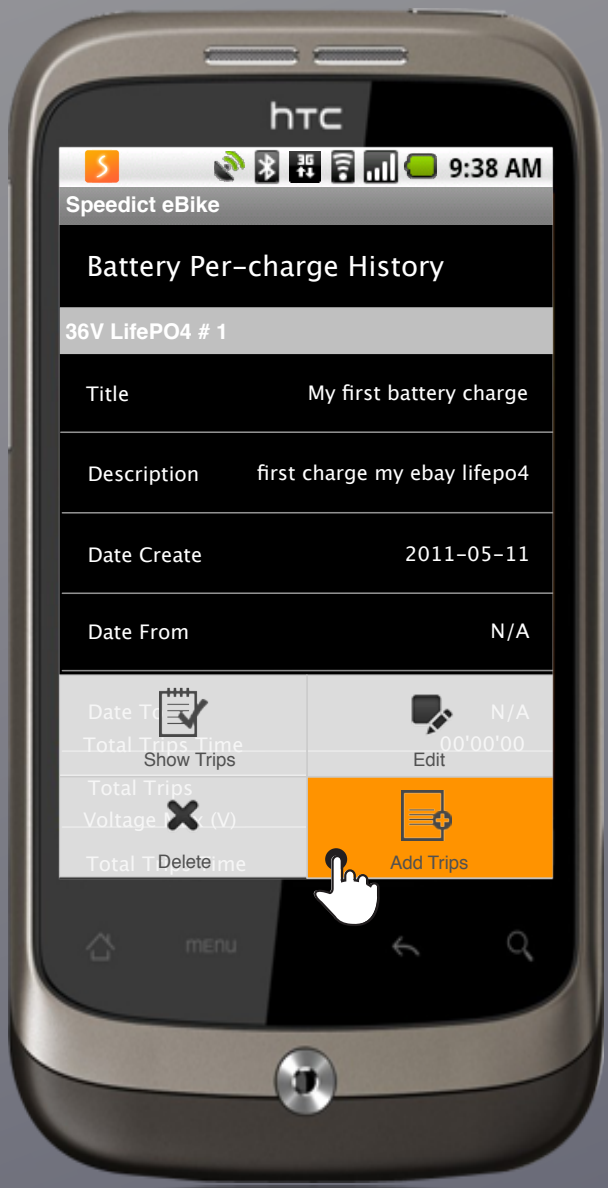
On Pre-charge Information page you can assign any trip record to it, pre-charge information or record contains all trip belonged to this battery charge.

E.G. With this battery fully charged, you drove to work several times, went to cinema until battery discharged, ebike recorded total 10 records. By assign these 10 trip records to this charge log, you have all information from this charge at fingertip.





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Select trip that belonged to this battery charge by click to the trip's check box, press the Update button to assign it to the charge record.

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Consolidated trip record into charge information as shown, e.g. Total Trips = 3 means 3 trips have been assigned to this charge record.

Click to the Show Trips button to review its trip record detail, click to the Edit button to edit the charge record's title and description, click to the Add Trips button to add or remove trip records, click to the Delete button to delete this charge record.

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Trip and Per-charge info field

Below is trip record and per-charge information detail, by comparing these information for knowing your battery performance ....

FIELD NAME	EXPLANATION
Title	Battery charge history / record name
Description	Battery charge record description
Date Create	Battery charge record date
Date From	The first trip / discharge date of the battery charge
Date To	The last trip / discharge date of the battery charge
Total Trip	Total number of trip / discharge of the battery charge
Total Trip Time	Total trips time with the battery charge
Voltage Max (V)	Maximum voltage of charged battery
Voltage Min (V)	Minimum voltage of charged battery
Voltage Avg (A)	Average voltage of charged battery
Voltage Consumed (V)	Total discharged voltage of battery
Current Max (A)	Maximum discharge current of battery discharge
Current Min (A)	Minimum discharge current of battery discharge
Current Fwd Avg (A)	Average discharge current of battery discharge
Current Regen Avg (A)	Average charge current of battery from regenerative

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Total Ah (Ah)	Total accumulated current
Total Fwd Ah (Ah)	Total accumulated current on discharge
Total Regen Ah (Ah)	Total accumulated current on regenerative
Regen Precentage (%)	Percentage of discharge and regenerative current
Watt Max (W)	Maximum power consumption in watt
Watt Avg (W)	Average power consumption in watt
Watt Hours (Wh)	Maximum power consumption per hour
Watt Hours Per Sensor Distance	Watt hour speed based on speed sensor
Watt Hours Per GPS Distance	Watt hour speed based on GPS data
Sensor Speed Max	Maximum speed measure based on speed sensor
Sensor Distance	Distance measure based on speed sensor
Sensor Speed Avg	Average speed measure based on speed sensor
Sensor Speed Avg Trip Time	Trip time measure based on speed sensor
GPS Speed Max	Maximum speed measure based on GPS data
GPS Distance	Distance measure based on GPS data
GPS Speed Avg	Average speed measure based on GPS data
GPS Speed Avg Trip Time	Trip time measure based on GPS data
Temperature # 1	Temperate measured by temperature sensor port 1
Temperature # 2	Temperate measured by temperature sensor port 2

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Speedict eBike Function mode

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Function Mode

Function Mode provide configurable on-board I/O port for throttle signal override, pedal cadence measurement as well as push button for 6km/h start aid to enrich Speedict eBike from monitoring and logging device to be a truly smart e-bike computer.

Multi Sense Mode	Default mode provide up to 2 temperature and 1 speed sensors mainly for monitoring purposes.
Simply Cut Mode	Monitor and simulate ebrake signal, sending braking signal to speed controller whenever cut off is needed.
PAS Mode	Capture and measure pedal cadence rate, matching power delivery for better power utilization.
Throttle Mode	Re-define throttle's low and high point for linearize its range, override throttle signal for current and speed throttle.
PAS To Throttle Mode	Converts PAS to throttle signal enable non-PAS speed controller with 1:1 PAS ratio capabilities.
Road Legal 1 Mode	Regulation EN15194 compliance - with Start-Aid button for start up to 6KM/h and PAS power speed up to legal limit.
Road Legal 2 Mode	Regulation EN15194 compliance - allow throttle (twist-grip) start up to legal limit (e.g. 25KM/h) with pas engaged otherwise speed limited to 6KM/h.

Function Mode Matrix

By connect with external sensor or signal source to specific I/O port for different function needs ...

FUNCTION MODE	PORT # 1	PORT # 2	PORT # 3	PORT # 4
MULTI-SENSE	RPM SENSOR	TEMPERATURE	TEMPERATURE	RESERVED
SIMPLY-CUT	RPM SENSOR	TEMPERATURE	EBRAKE INPUT	EBRAKE OUT
PAS	RPM SENSOR	TEMPERATURE	PAS INPUT	PAS OUT
THROTTLE	RPM SENSOR	TEMPERATURE	THROTTLE OUTPUT	THROTTLE INPUT
PAS THROTTLE	RPM SENSOR	TEMPERATURE	PAS INPUT	THROTTLE OUT
ROAD LEGAL 1	RPM SENSOR	START-AID BUTTON	PAS INPUT	THROTTLE OUT
ROAD LEGAL 2	RPM SENSOR	THROTTLE INPUT	PAS INPUT	THROTTLE OUT

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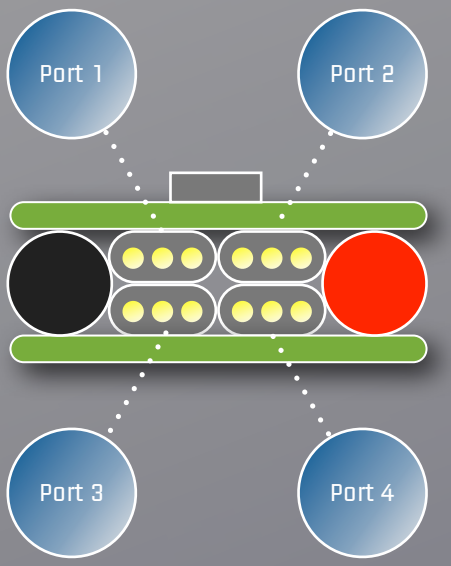
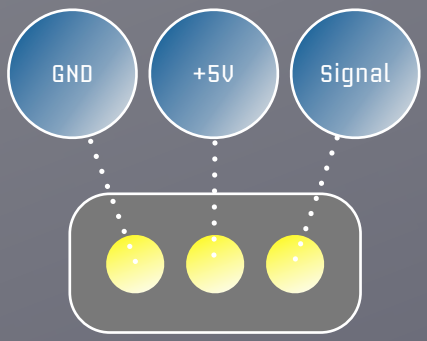
I/O Port Location

Speedict eBike come with 4 I/O ports can be configured for different functions.



eBike Front View



Port Pin Assignment

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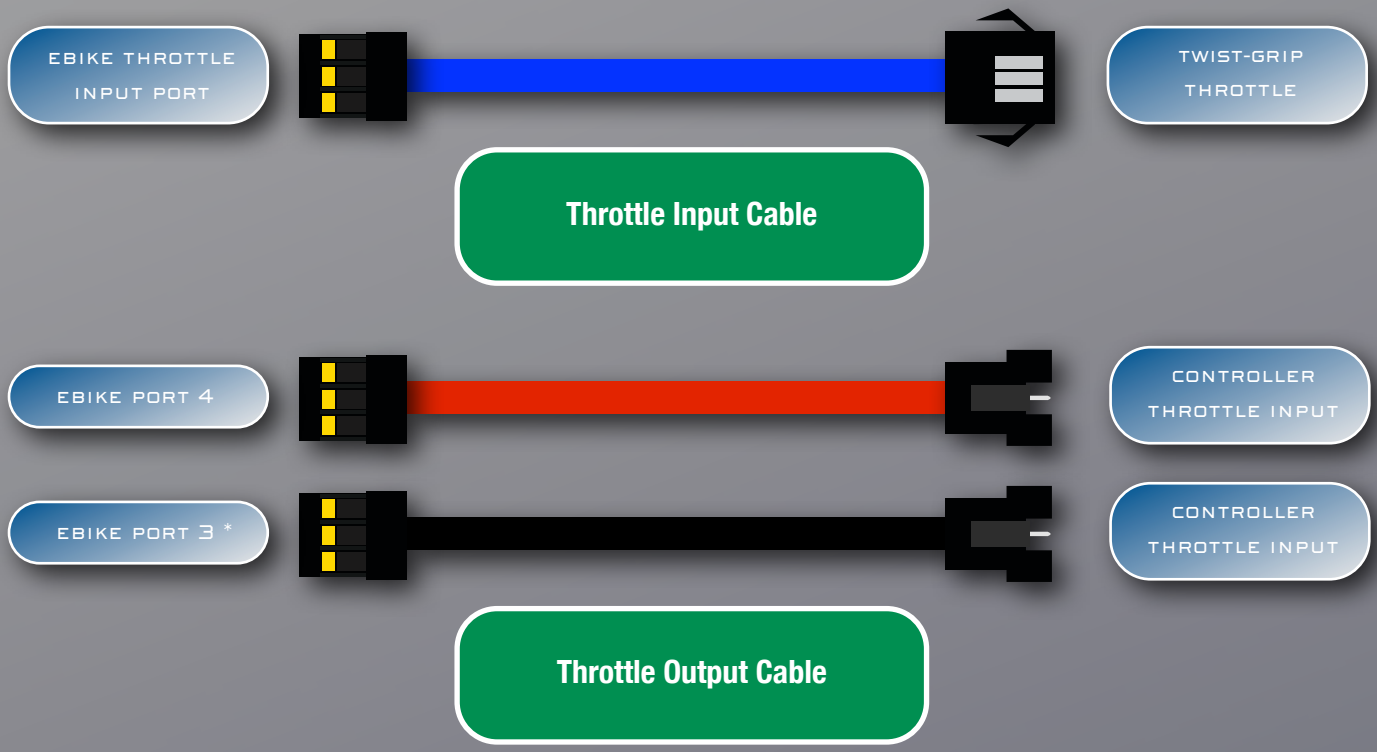
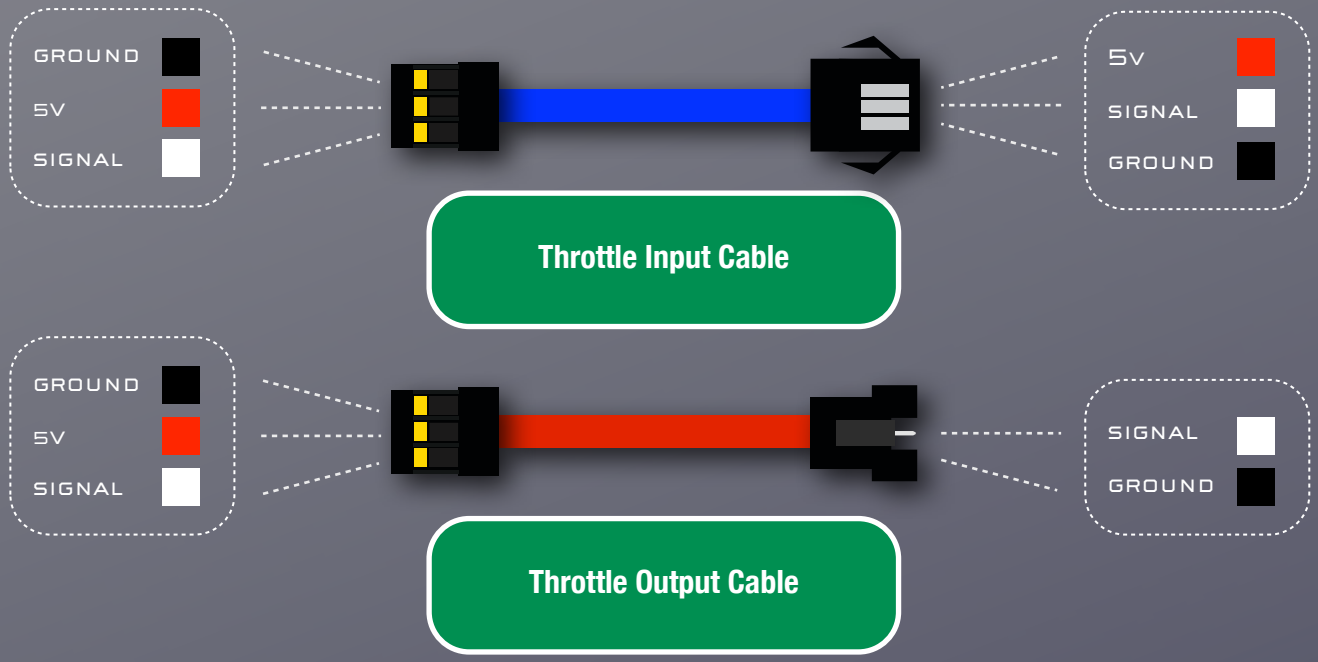
Signal Cables

Signal cable with built-in circuit to capture throttle signal as well as to simulate throttle signal to speed controller, it is available on speedict website for purchase separately.



* when throttle mode with temperature sensor is installed, use this black throttle cable instead

Signal Cables Pin Assignment



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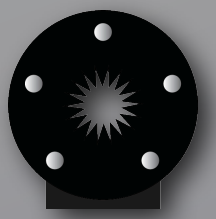
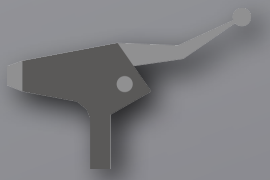
Sensors And Components

The sensor and component shown on this document are for reference only, its size and sharp may different from real object !



PAS SENSOR

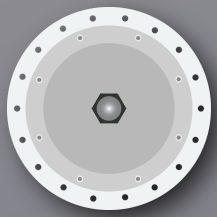
SPEEDICT EBIKE TEMPERATURE SENSOR



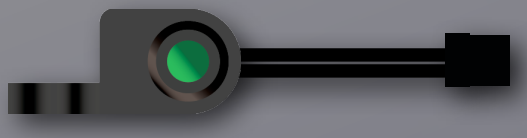
EBRAKE LEVER

TWIST THROTTLE

SPEEDICT EBIKE SPEED SENSOR



HUB MOTOR



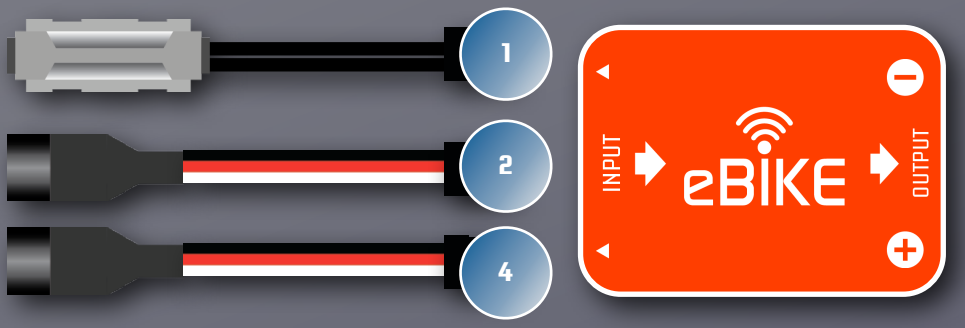
SPEEDICT EBIKE 6KM BUTTON

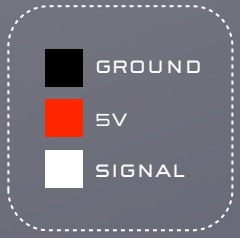
Connection Diagram

Connect speed controller or signal source for different configuration functions.

Multi Sense Mode

The default configuration for those who need up to 2 temperature sensor for system monitor purpose.





Multi Sense Mode

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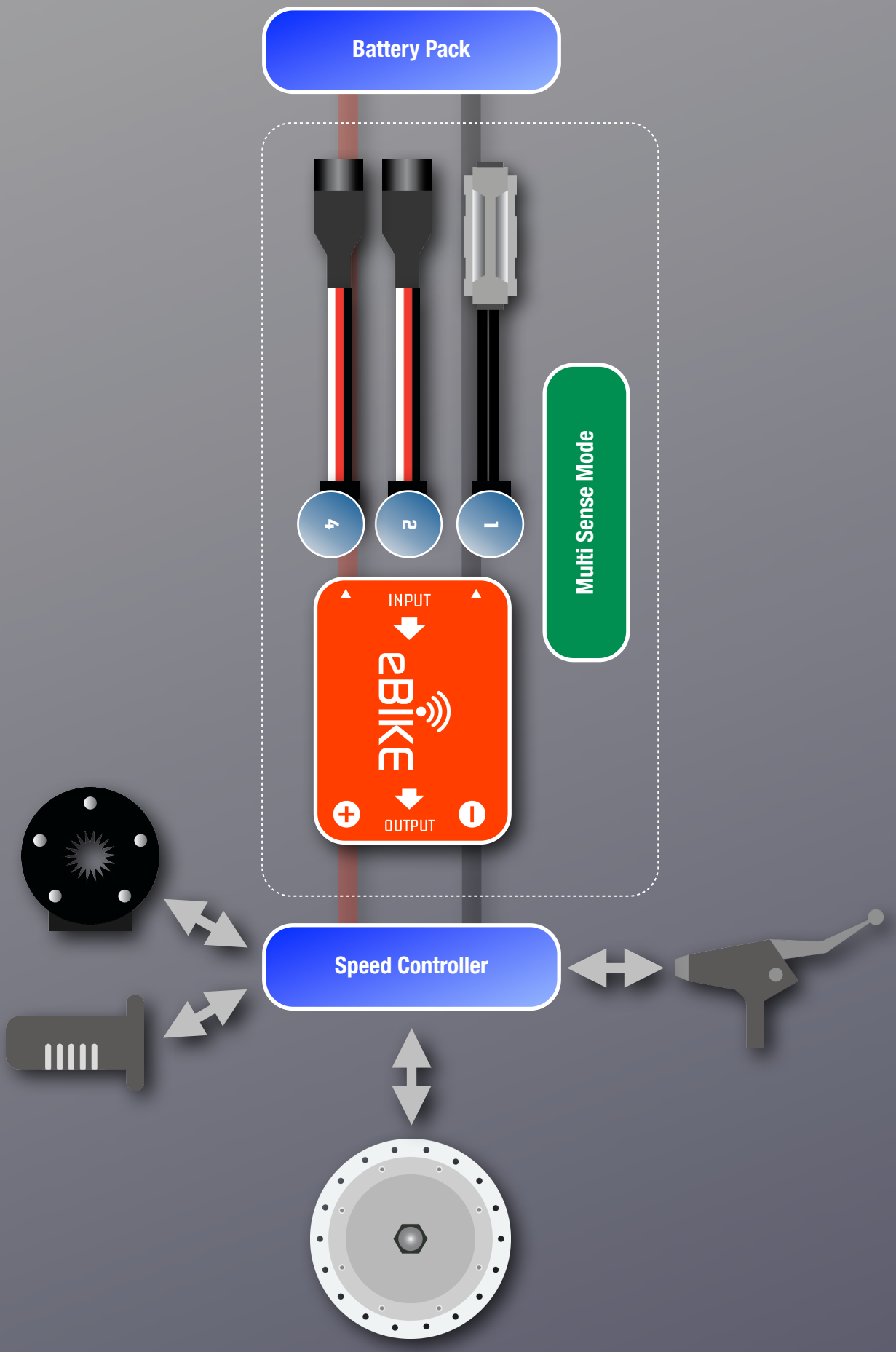

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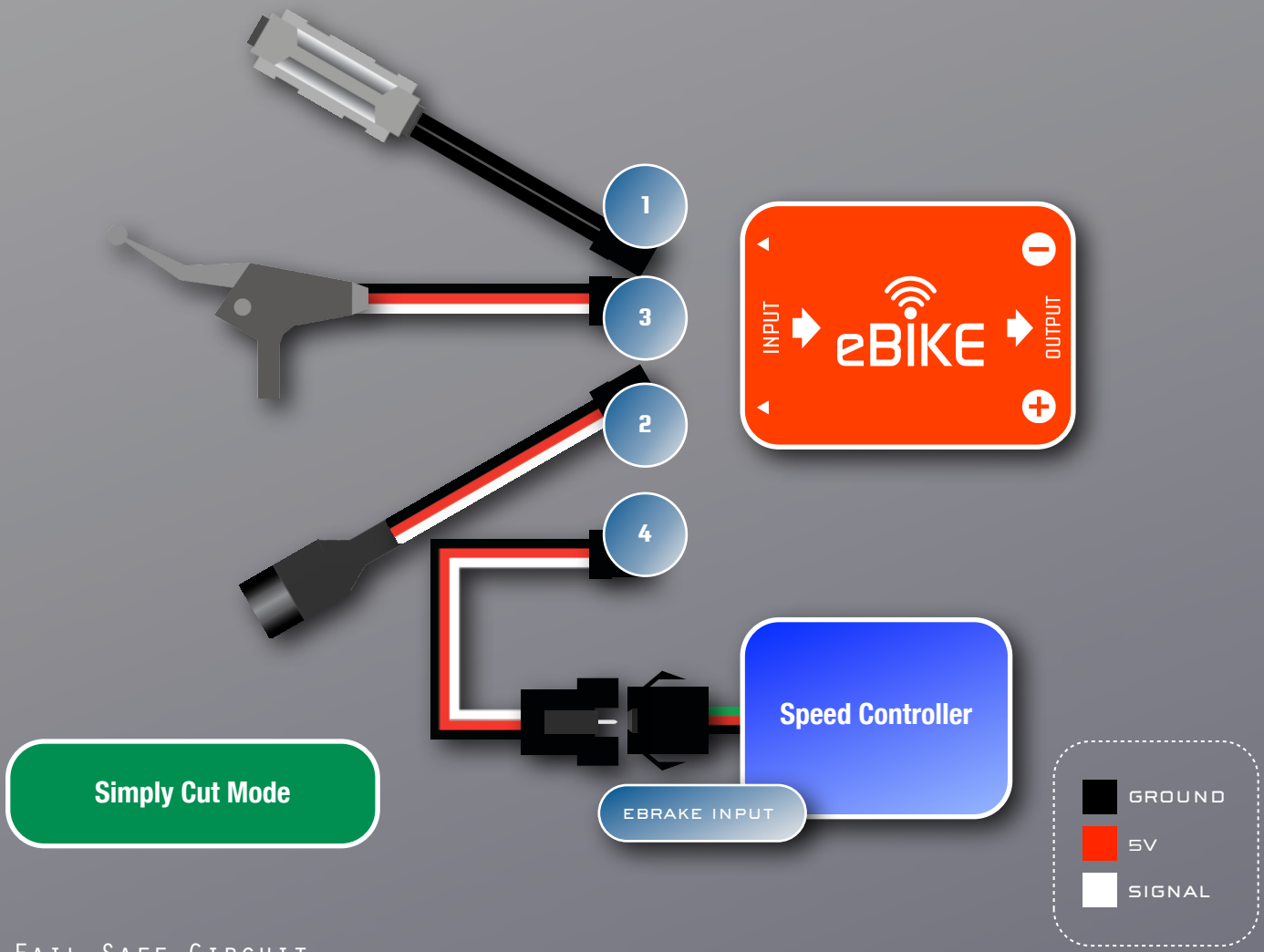
Simply Cut Mode

This mode provide simply cut off feature whenever cut off point is reached by simulate braking signal back to speed controller.



Fail-Safe Circuit

In the event of Speedict eBike malfunction, it may cause e-braking system stop responding, by simply branch out the ebrake signal line and directly connect to speed controller's ebrake input whenever speedict ebike is malfunction or lost control e-braking lever can still send braking signal to speed controller via this line !

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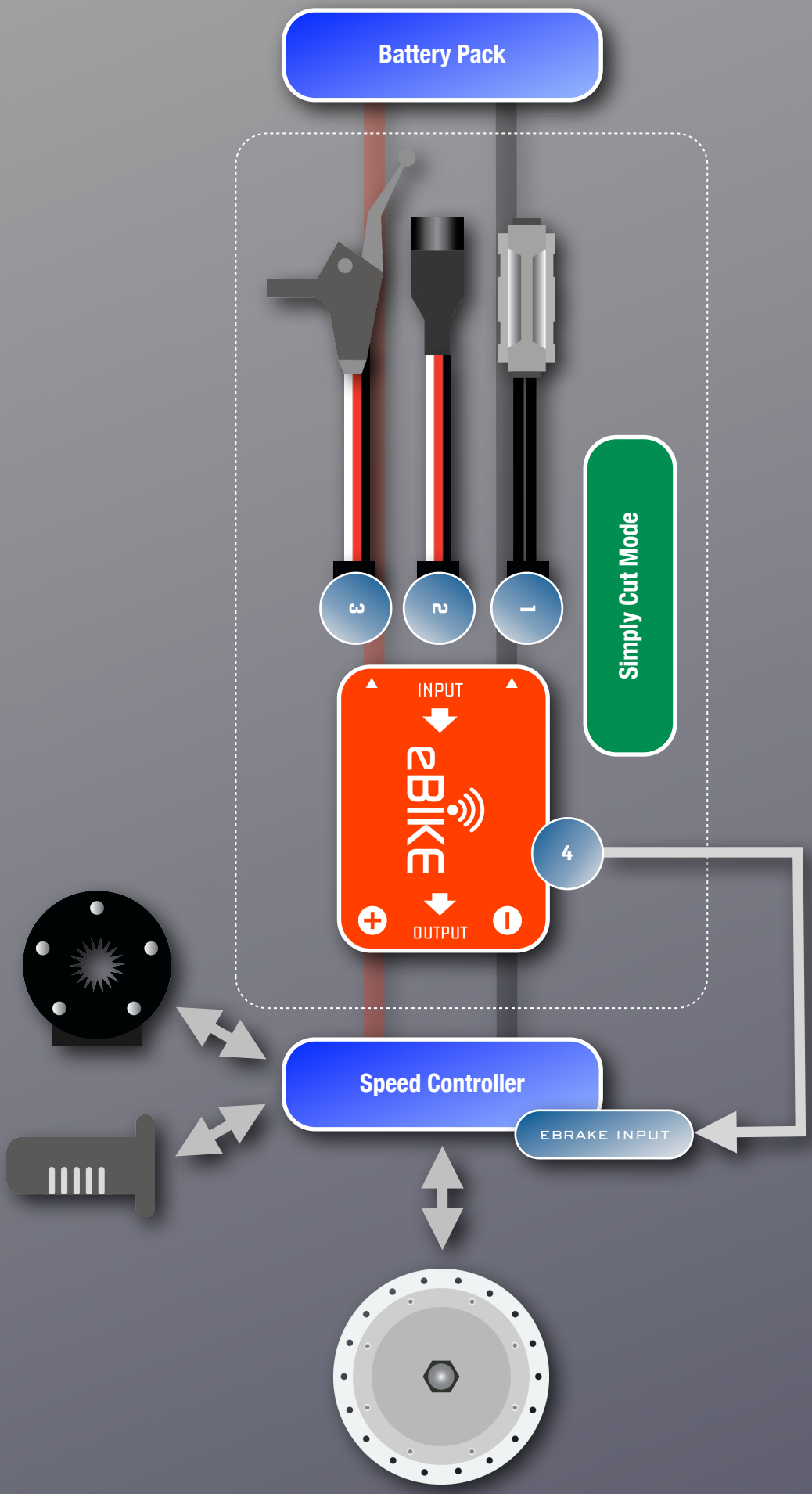
Simply Cut Mode Connection Diagram



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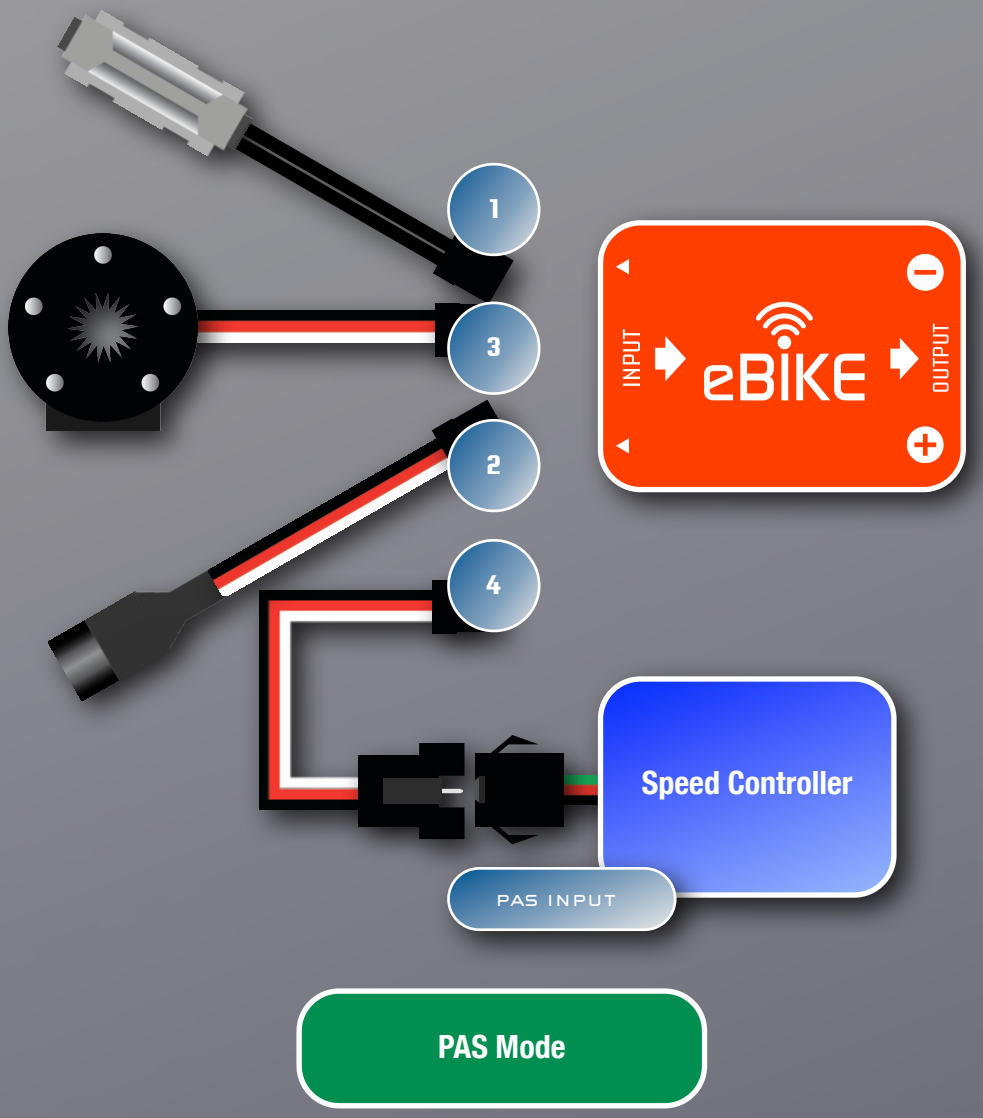
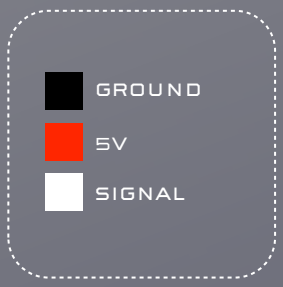
PAS Mode

With PAS mode is selected, system can monitor the rider's pedal cadence rate, display and record for further analyze such as Pedal Rate vs. Power vs. Speed ...
PAS model also provide new feature called cadence matching for fully utilize power system.





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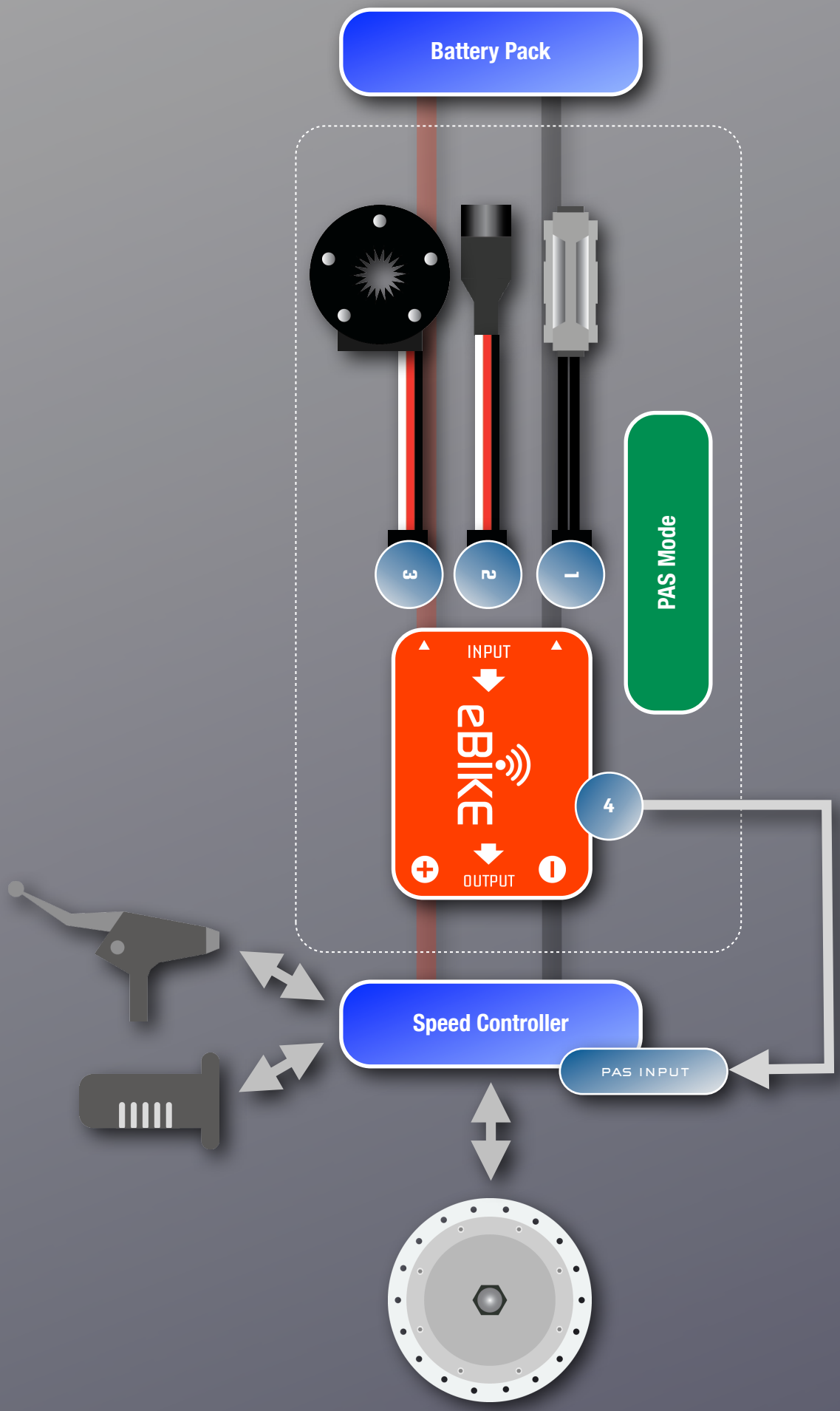
PAS Mode Connection Diagram



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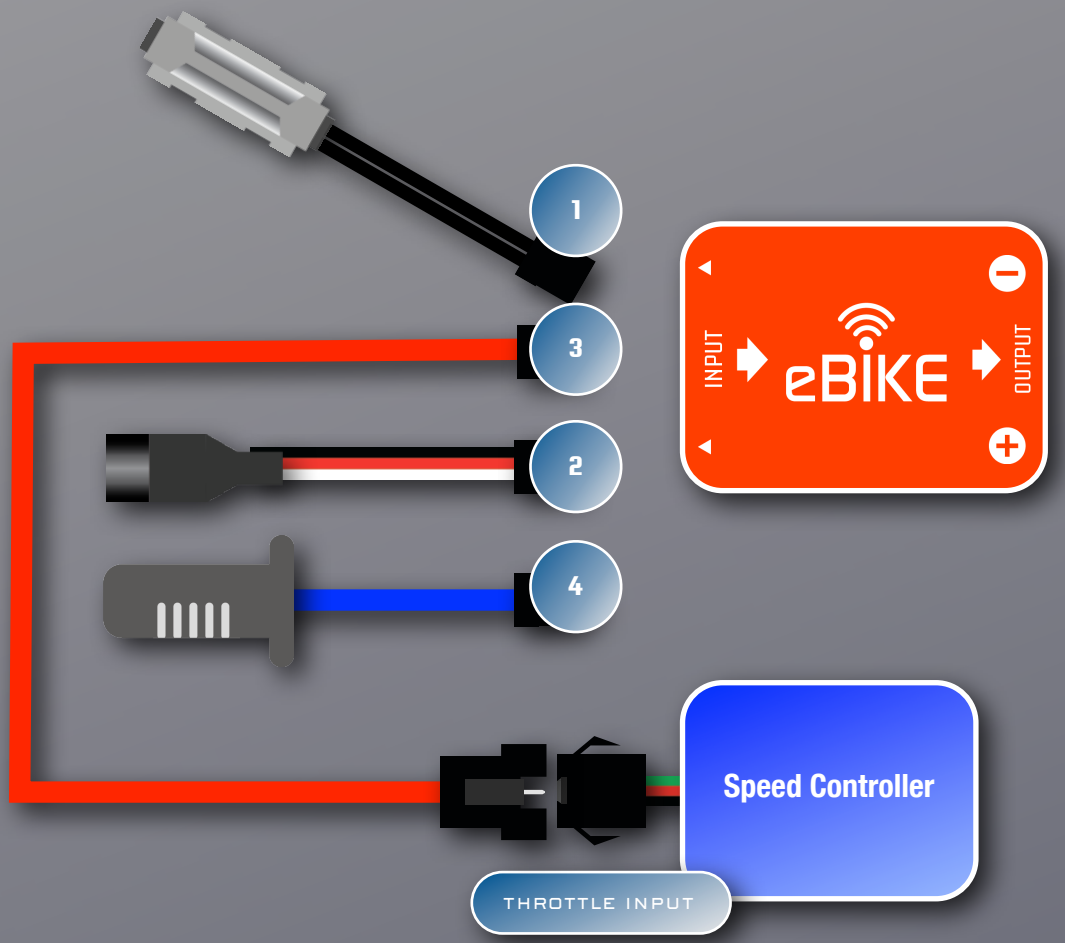
Throttle Mode

When throttle mode is selected, throttle's signal will be monitored and pass through back to speed controller, whenever cut off point is reached, system will control and simulate throttle signal to speed controller E.G. regulate and maintain speed to 25KM/h when over speed is detected.

This mode can re-define throttle's lowest and highest point for utilize throttle range.



Throttle Mode

GROUND
5V
SIGNAL

SPEEDICT THROTTLE IN CABLE
SPEEDICT THROTTLE OUT CABLE

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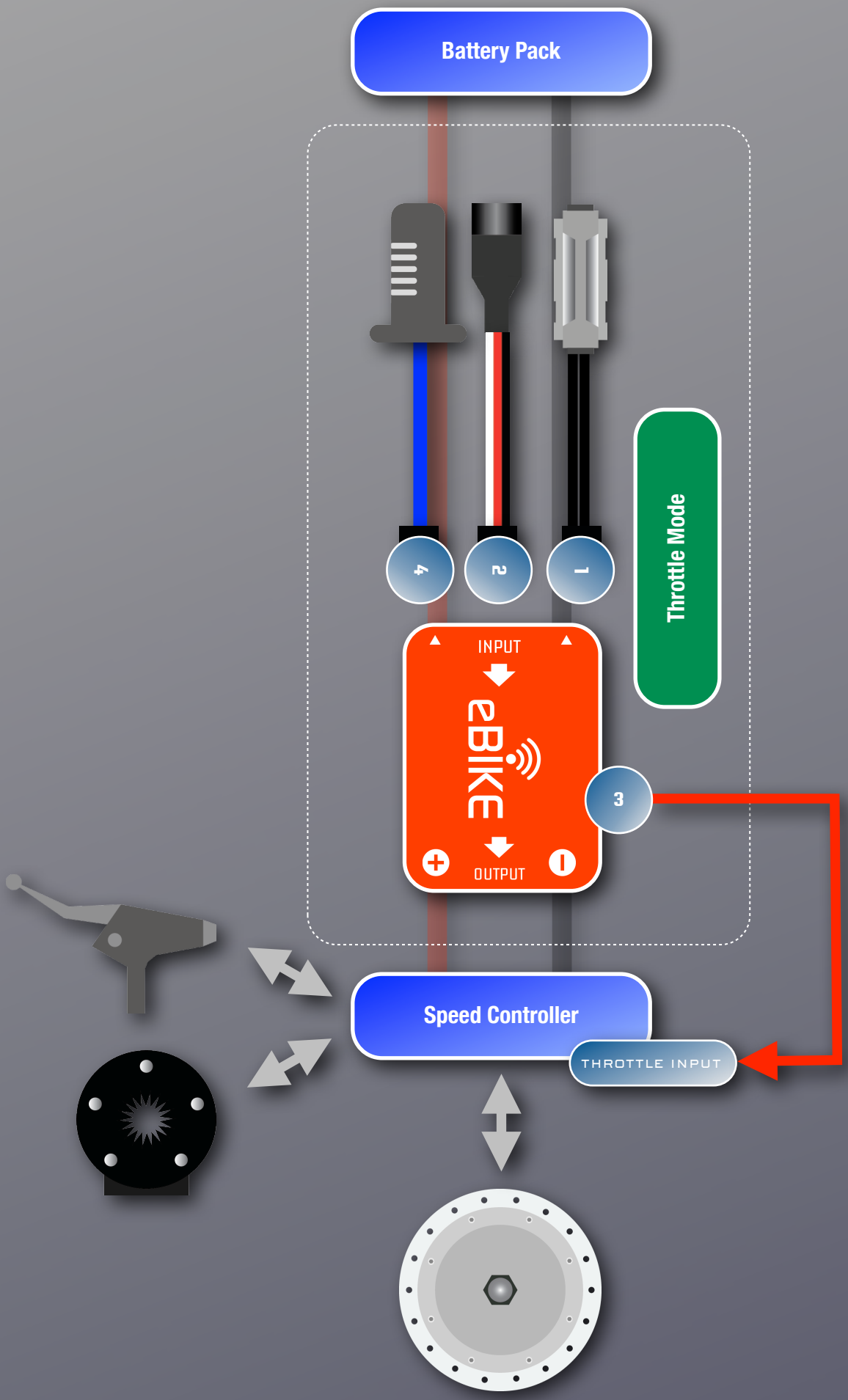
Throttle Mode Connection Diagram



Unlike other function modes, the throttle mode need to assign port 3 as throttle output and port 4 for throttle input

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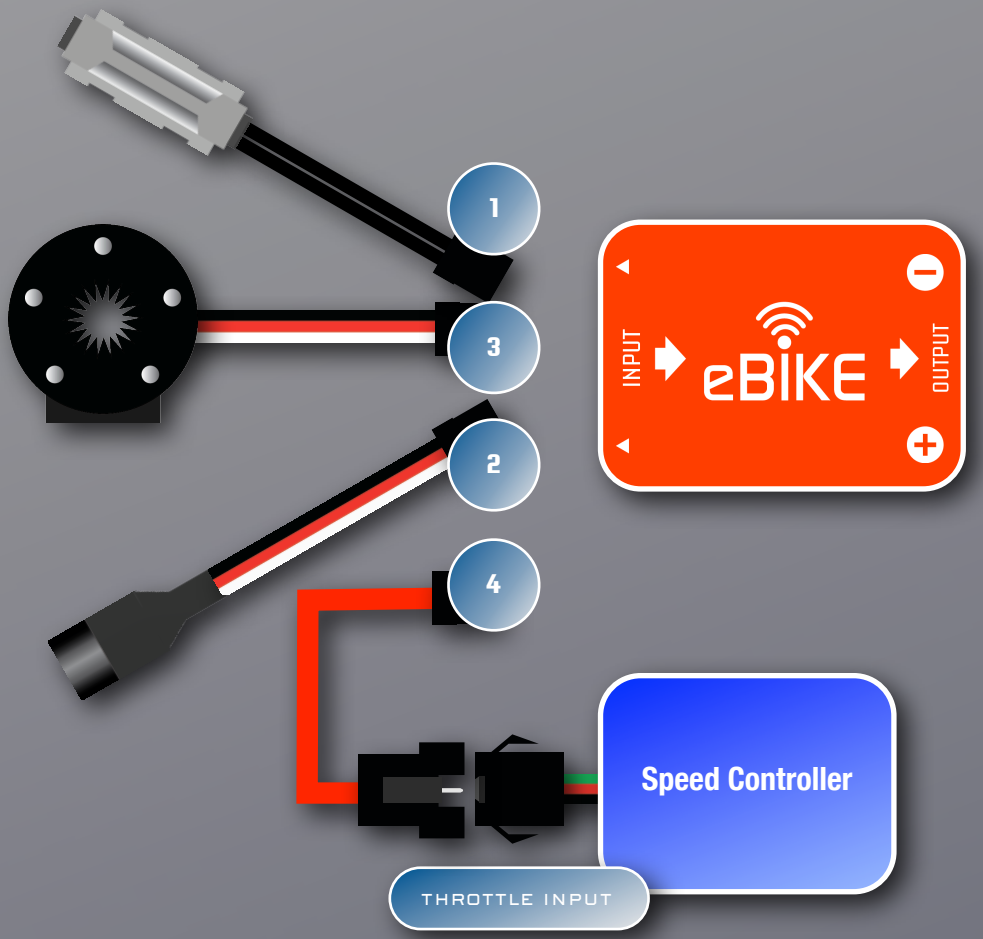
PAS To Throttle Mode

For generic speed controller lack of 1:1 PAS ratio, this mode can translate a PAS signal source to controller's throttle signal in combining cadence matching feature to make PAS 1:1 ratio possible.



PAS to Throttle Mode

GROUND
5V
SIGNAL

SPEEDICT THROTTLE OUT CABLE

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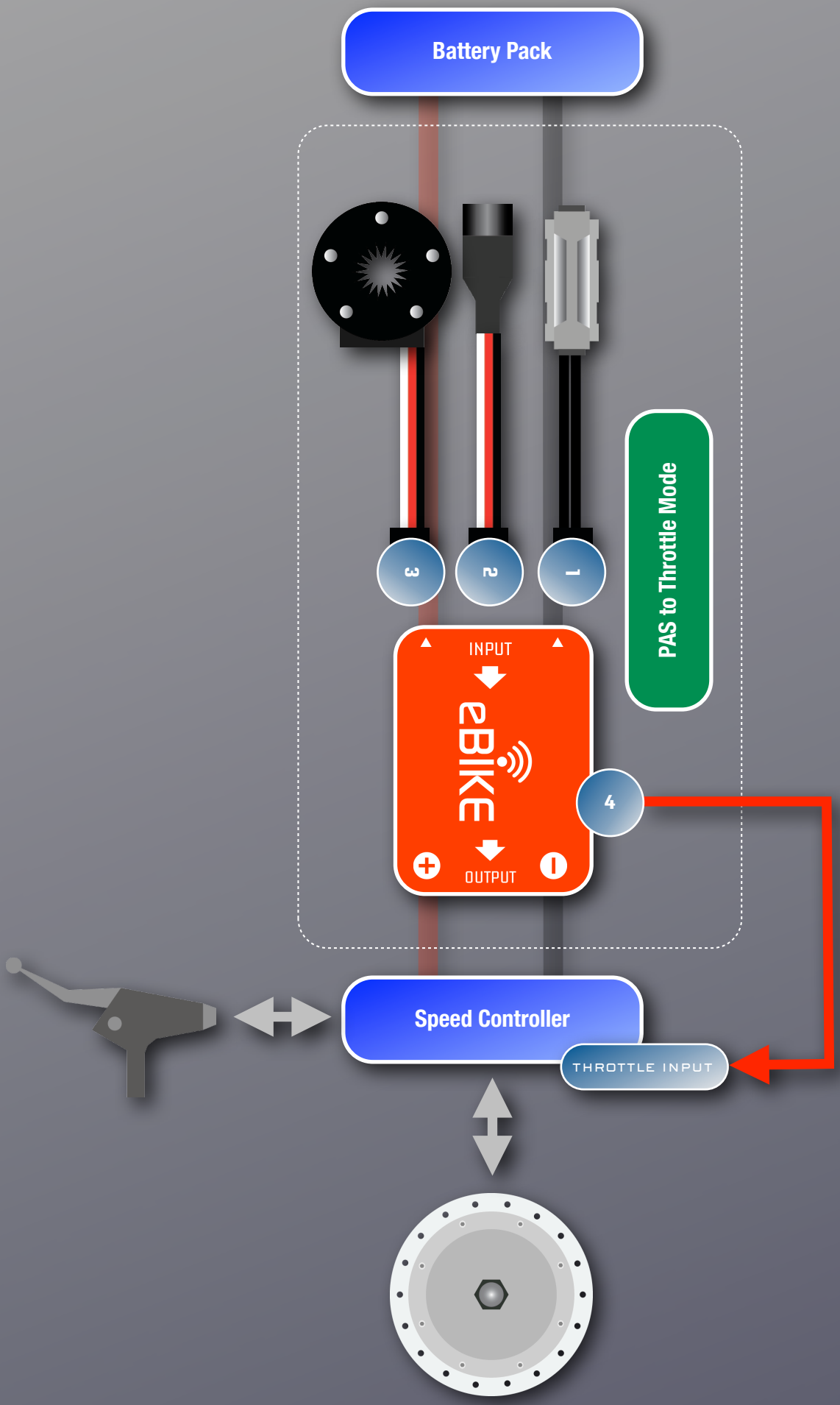

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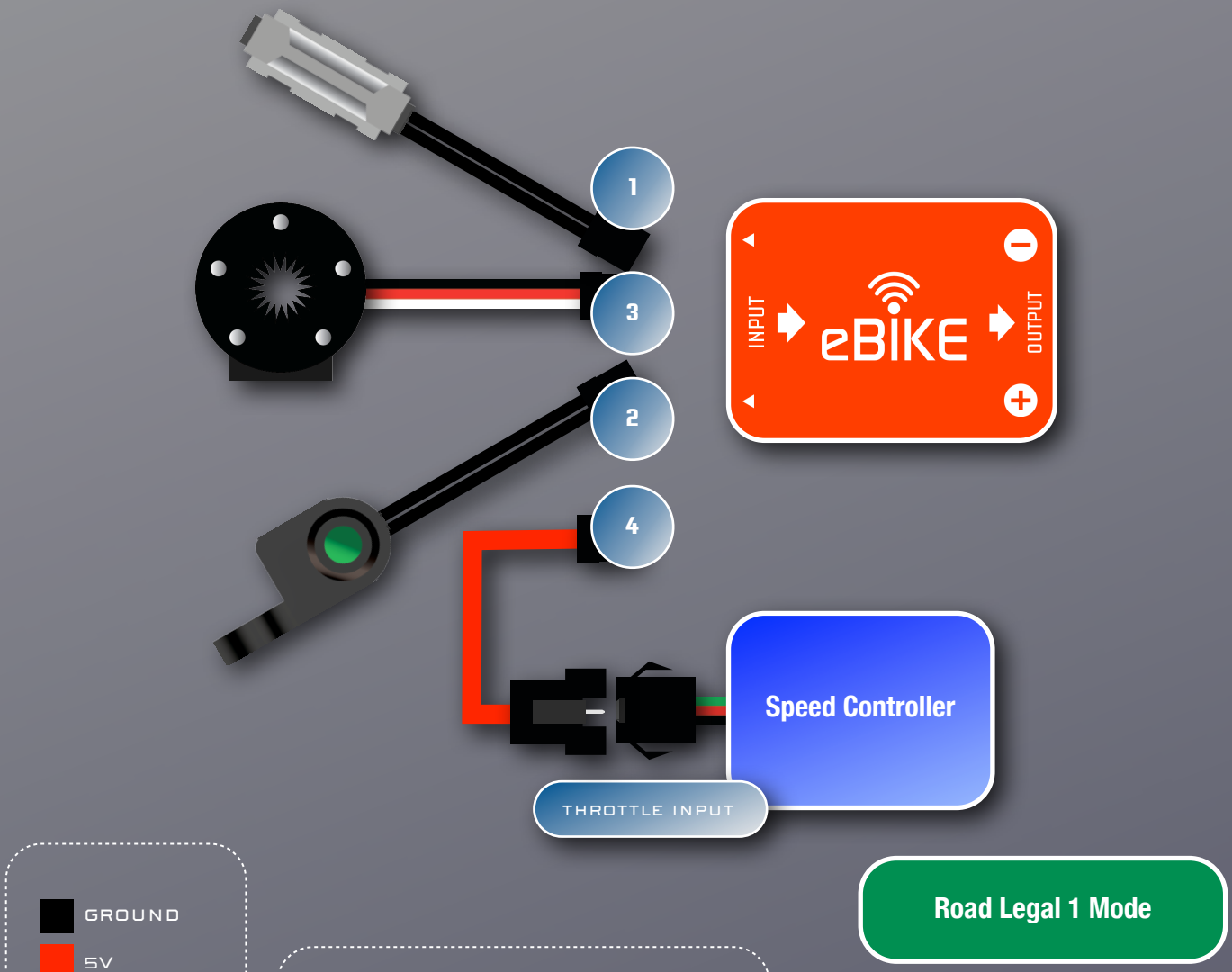
Road Legal 1 Mode

In some european countries, regulation EPAC (Electrically Power Assisted Cycles) required startup assist provide speed up to 6KM/h, with this mode is selected and when Start-Aid button is pressed it will delivery power to speed up to 6KM/h, and pedal assist system delivery power up to legal speed 25KM/h.



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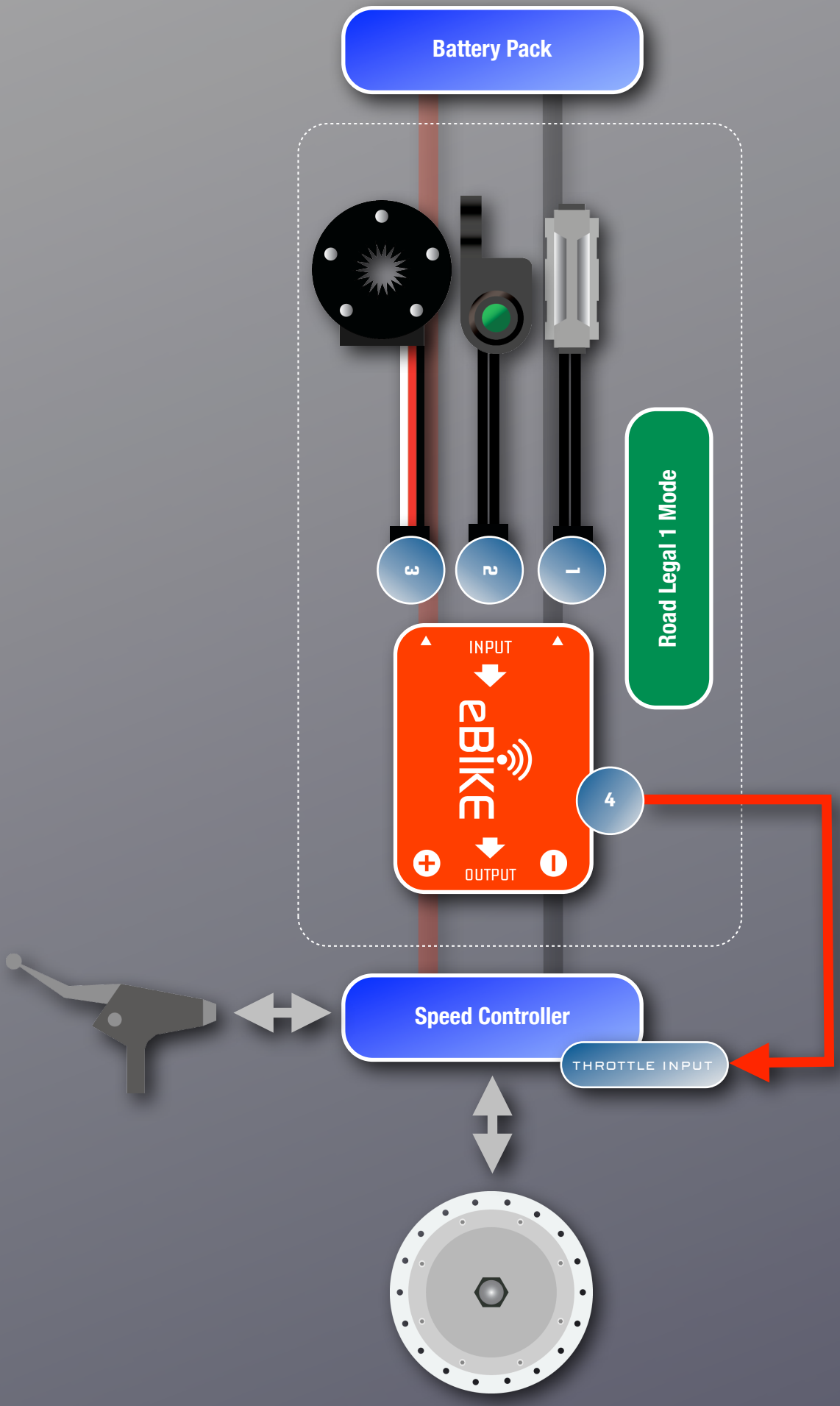

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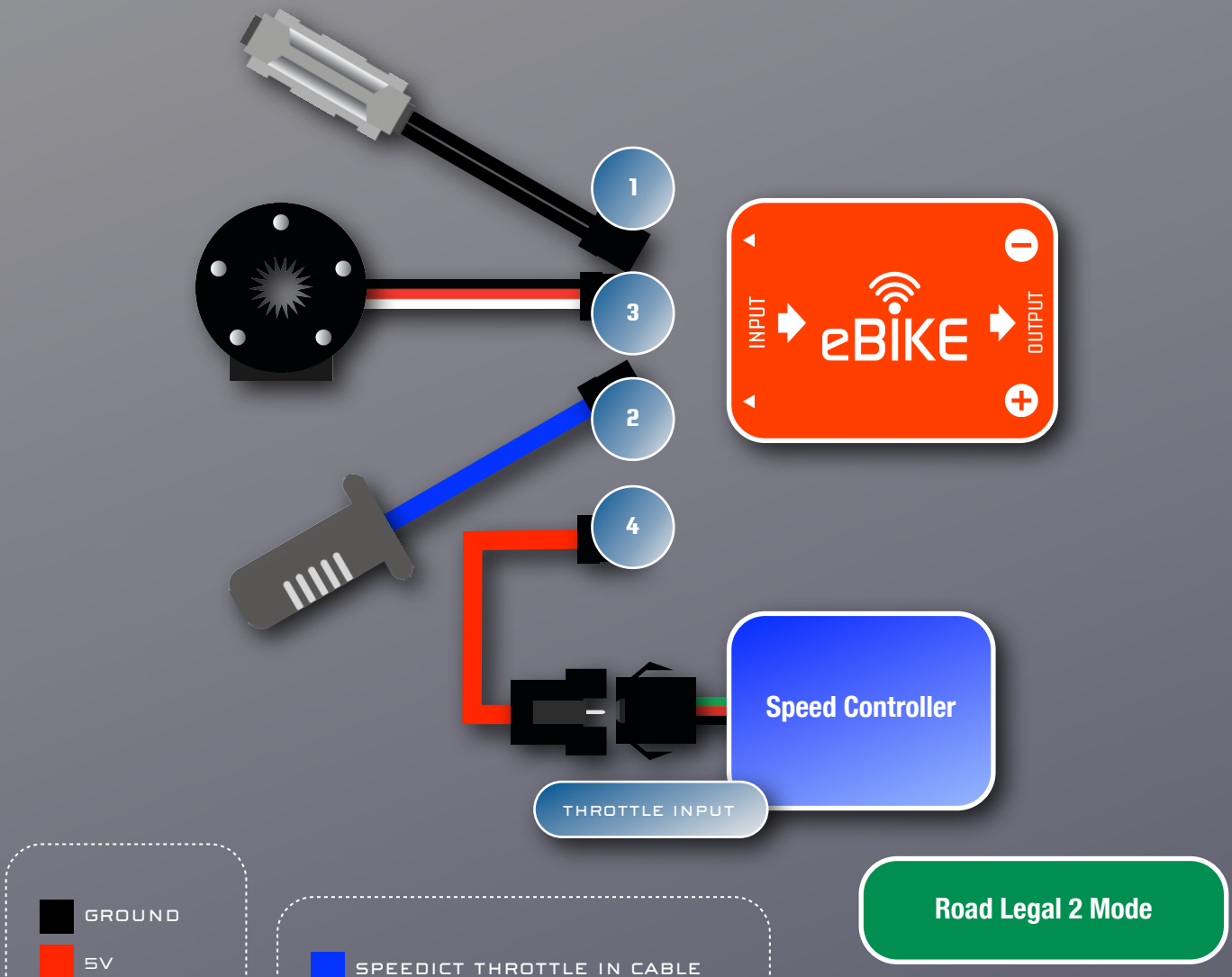
Road Legal 2 Mode

In some european countries, regulation EPAC (Electrically Power Assisted Cycles) required startup assist provide speed up to 6KM/h, with this mode is selected it allow twist-grip throttle power for start up and speed up to 6KM/h whenever pedal movement is detected (PAS) it continuos delivery power up to legal speed 25KM/h.



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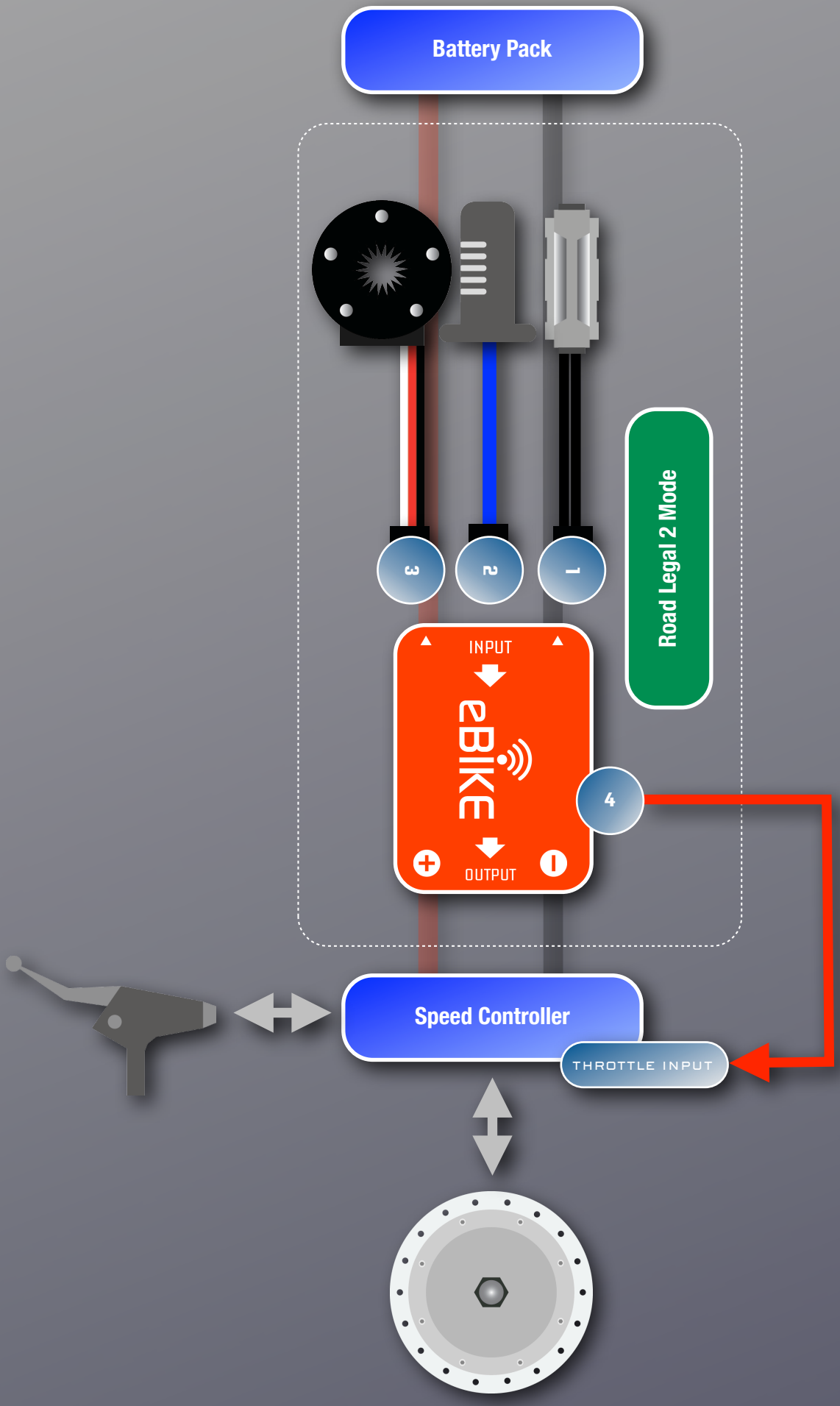

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Select Function Mode via Android Client

Click on Android main menu button for Speedict client menu then click on option item for option submenu, when option submenu displayed, click on Function Mode for available functions. on Function Mode list click on Multi-Sense Mode's triangle button for selection.

Multi Sense Mode

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Its port, pin and connection diagram introduction page will be shown, click on OK button to confirm the mode change.

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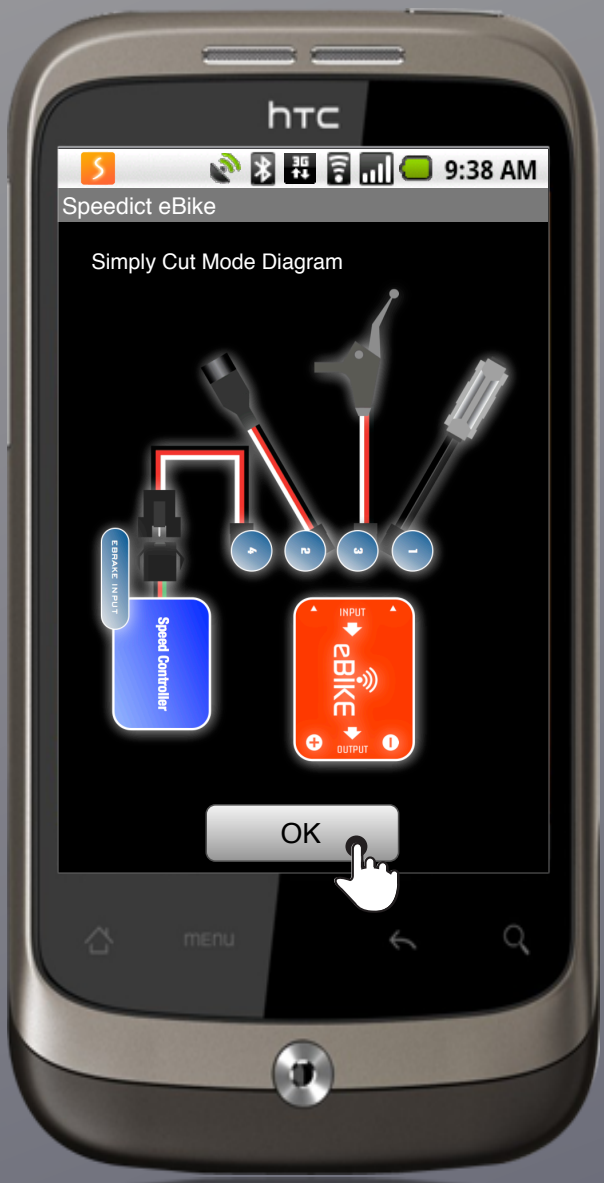
Simply Cut Mode

For Simply Cut mode, click on the Simply Cut triangle button ... on connection diagram page press the OK button to confirm the selection.

htc
9:38 AM
Speedict eBike
Function Mode
Function mode with configurable function model through its on-board 4 i/o ports to provide riders' needs on both safety and system utilization.
Current Mode selected : N/A
Multi-Sense
Default mode support up to 2 Temperature and 1 Speed sensor mainly for system monitoring
Simply Cut
Monitor and simulate ebrake signal, sending brake signal to speed controller whenever cut off is need
PAS
menu



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PAS Mode

For PAS Mode, click on the PAS triangle button ... on connection diagram page click on the OK button to confirm mode change and for next available option features.

htc
9:38 AM
Function Mode
Function Mode
Function mode with configurable function model through its on-board 4 i/o ports to provide riders' needs on both safety and system utilization.
Current Mode selected : Simply Cut
signal to speed controller whenever cut off is needed
PAS
Capture and measure pedal cadence rate, match the power delivery for better power utilization
Throttle
Re-define throttle's low and high point for linearize throttle range, provide current and speed throttle
PAS to Throttle
menu
htc
9:38 AM
Speedict eBike
PAS Mode Diagram
PAS INPUT
Speed Controller
INPUT
eBIKE
OUTPUT
OK
menu

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On PAS magnet page enter the number of sensor magnet number and click to the Next button for cadence matching setting, on cadence matching page enter the pedal cadence rate for desire power level output, this feature especial useful for power utilization, click on the OK button to save the setting on device.

htc
9:38 AM
Speedict eBike
Cadence Matching
Cadence Matching feature translate your pedal cadence RPM in proportion to power delivery for better power utilization.
Note : for generic speed controller lack of 1:1 PAS feature, use PAS to Throttle mode is highly recommended.
PAS Cadence Rate (1 - 120)
Power Level Output (1 - 100)
60
=
100
OK
menu

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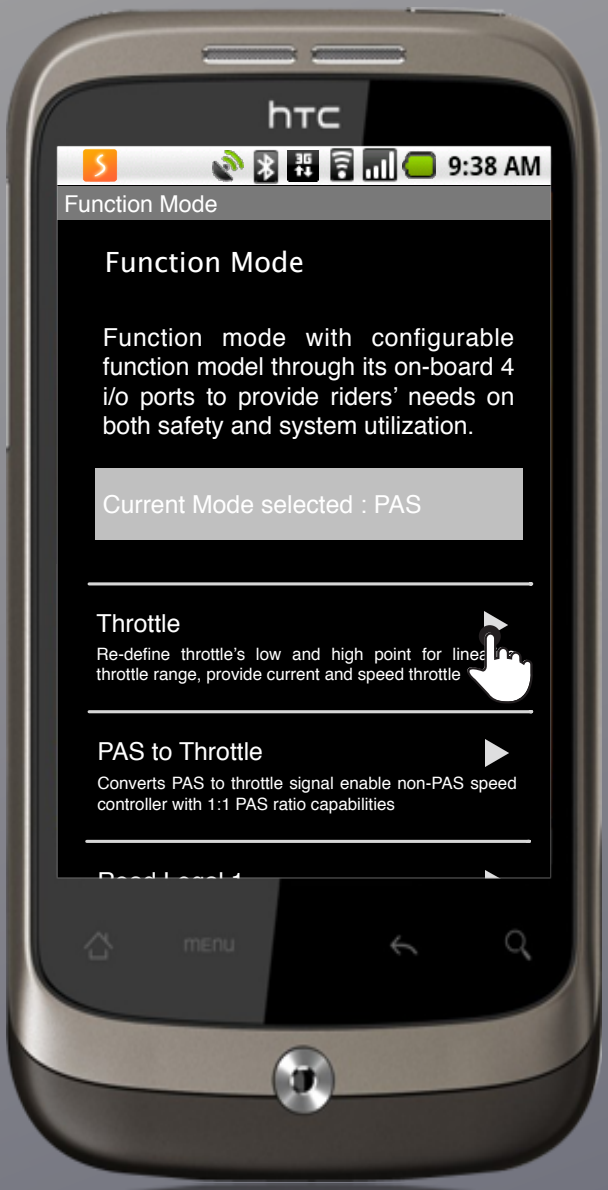
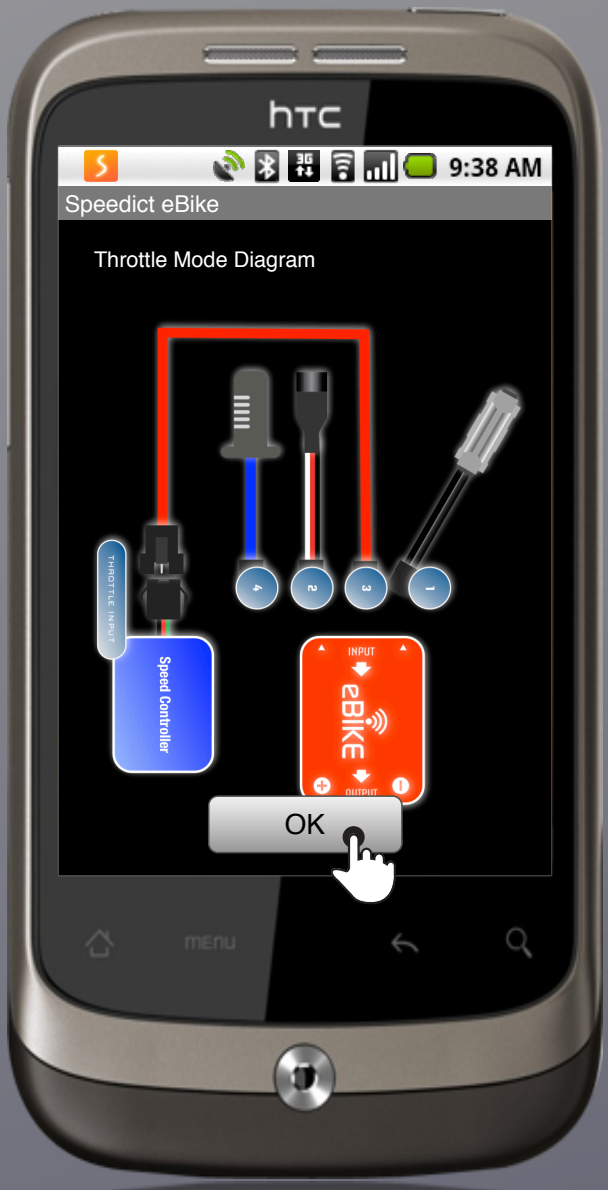
Throttle Mode

For Throttle Mode, click on the Throttle triangle button ... on connection diagram page click on the OK button to confirm mode change and for next available option features.


htc
9:38 AM
Function Mode
Function Mode
Function mode with configurable function model through its on-board 4 i/o ports to provide riders' needs on both safety and system utilization.
Current Mode selected : PAS
Throttle
Re-define throttle's low and high point for linea
throttle range, provide current and speed throttle
PAS to Throttle
Converts PAS to throttle signal enable non-PAS speed controller with 1:1 PAS ratio capabilities
menu



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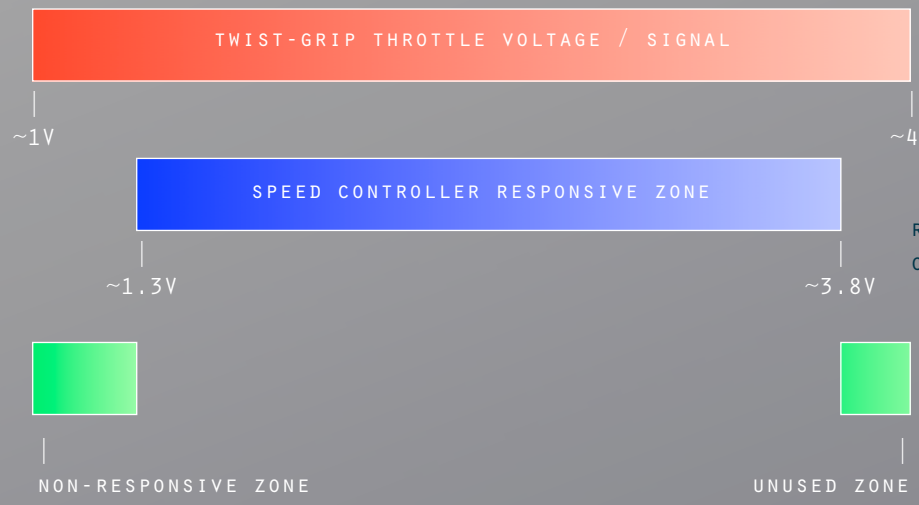

On Throttle Range Setup page define the lowest and highest throttle point may help to increase throttle response and utilize entire throttle range due to most of the speed controller and twist-grip throttle on the market have compatible issues.

Now lift the bike above ground, and ready for throttle range setup ...

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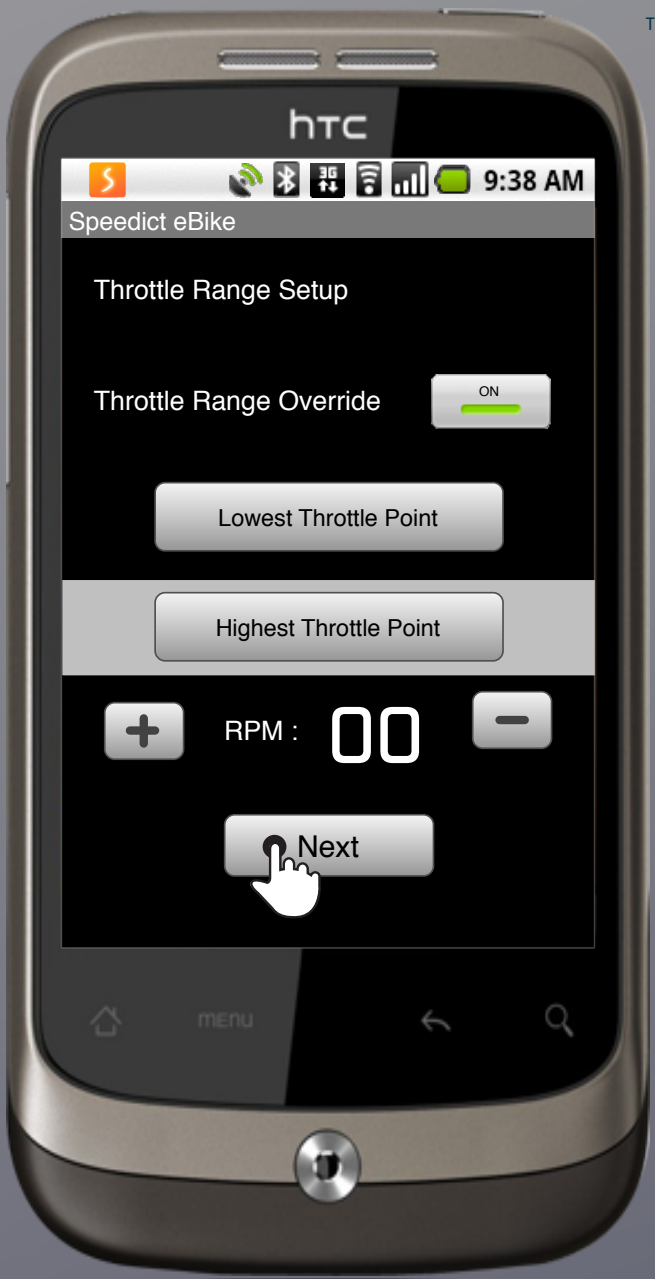
To define the lowest throttle point, click on the Lowest Throttle Point button then press the + button until motor start turning, for every + button is pressed Speedict eBike increase voltage and send to speed controller as throttle signal ...

E.G. to start turning motor, Speedict eBike may need to send 1.3V to speed controller and mark this voltage as lowest throttle point therefore whenever generic twist-grip throttle or PAS sensor is installed its lowest point voltage 1V will be translated to 1.3V by Speedict eBike.

For safety purpose, press the - button few times to retrieve some points backward due to temperature may vary throttle voltage, try for the best result.

To define the highest throttle point, click on the Highest Throttle Point button then press the + button all the way up to the maximum speed the controller can delivery, on pressing the + button, some controller may cease power as it may over controller's predefined highest voltage point e.g. 3.8V, whenever it happened press the - button until regain the controller high voltage point.

Press the Next button to set the motor start power.



htc
9:38 AM
Speedict eBike
Motor Start Power
Motor start power option control startup power with 100 level increment from soft to hard start, with soft start power can prevent geared motor from damage.
Start Power (1 - 100)
20
Next
menu

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Set throttle type for either Speed or Current govern by throttle action, E.G. when Speed Throttle is selected and speed value is set to 25KM/h mean when full throttle is hold Speedict eBike will try keep the speed to 25KM and whenever half throttle is hold it will maintain speed on 12.5KM/h, fine turn with gain value for better result, for current throttle E.G. set 20A for current value mean when full throttle is on, system ceiling to 20A and when half throttle is hold it will govern to 10A ...

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Press the Save button to save the setting on device.

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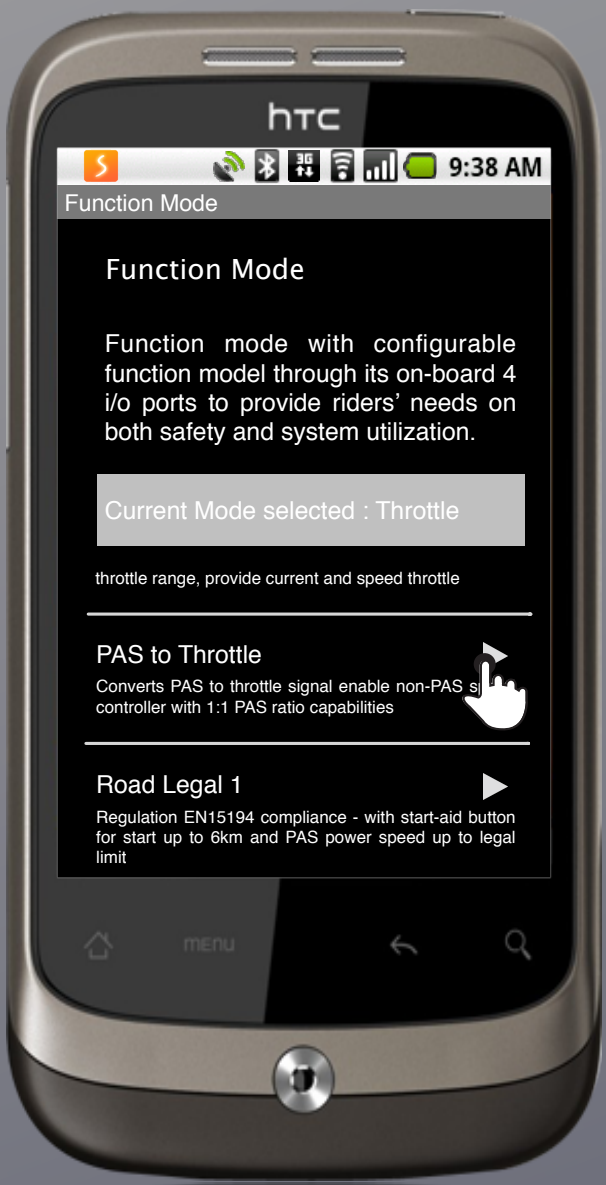
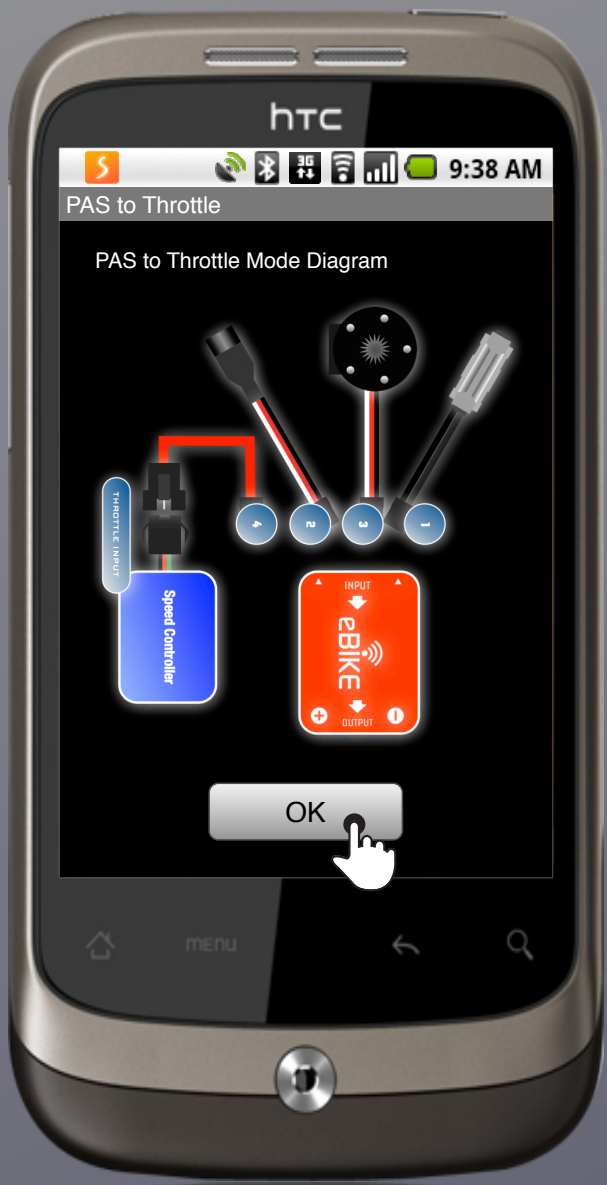
PAS To Throttle Mode

On PAS To Throttle Mode, setup as PAS Mode with PAS Sensor Magnet and Cadence Matching + Motor Start Power + Throttle Type especially useful for generic speed controller lack of good PAS feature.

When cadence matching is set to 60RPM = 100% Power, Throttle Type is Speed Throttle and set to 30KM/h mean whenever cadence is reached 60 the speed will be governed to 30KM/h, when cadence is 30 speed will governed to 15KM/h etc ...


htc
9:38 AM
Function Mode
Function Mode
Function mode with configurable function model through its on-board 4 i/o ports to provide riders' needs on both safety and system utilization.
Current Mode selected : Throttle
throttle range, provide current and speed throttle
PAS to Throttle
Converts PAS to throttle signal enable non-PAS s
controller with 1:1 PAS ratio capabilities
Road Legal 1
Regulation EN15194 compliance - with start-aid button for start up to 6km and PAS power speed up to legal limit
menu



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Road Legal 1 Mode

This is one of the EN-15194 compliant modes with 6KM/h Start-Aid button, with Start-Aid button is installed and pressed (hold), Speedict eBike delivery power to start a bike up to 6KM/h and whenever PAS is detected it will transfer control to PAS for speed up to legal 25KM/h ...

Click on the Road Legal 1 Mode triangle button to select Road Legal 1 Mode, and after connection diagram -> enter PAS Sensor number -> Cadence Matching ratio -> Throttle Range Setup -> Motor Start Power -> finally Throttle Type.

htc
9:38 AM
Function Mode
Function Mode
Function mode with configurable function model through its on-board 4 i/o ports to provide riders' needs on both safety and system utilization.
Current Mode selected : PAS to Throttle
Converts PAS to throttle signal enable non-PAS speed controller with 1:1 PAS ratio capabilities
Road Legal 1
Regulation EN15194 compliance - with start-aid button for start up to 6km and PAS power speed up to limit
Road Legal 2
menu
htc
9:38 AM
Speedict eBike
Road Legal 1 Mode Diagram
THROTTLE INPUT
Speed Controller
INPUT
eBIKE
OUTPUT
OK
menu

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Road Legal 2 Mode

Like Road Legal 1 Mode mentioned above, this mode combine twist-grip throttle and PAS and allow start up by twist-grip throttle up to 6KM/h, whenever PAS is detected either twist-grip throttle or PAS can delivery power up to 25KM/h road legal speed.

Click on the Road Legal 2 Mode triangle button to select Road Legal 2 Mode, and after connection diagram -> enter PAS Sensor number -> Cadence Matching ratio -> Throttle Range Setup -> Motor Start Method -> finally Throttle Type.

Motor Start Method control how motor response to twist-grip throttle action.

6 km/h : with this option is selected, when start with twist-grip throttle without PAS movement is detected, system will govern the top speed up to 6km/h.

Start Power : with this option is selected, whenever PAS movement is detected the motor power is based on either twist-grip throttle or PAS action without 6km/h ceiling, this option may applied to some countries, so check your local regulation is highly recommended.

htc
9:38 AM
Function Mode
Function Mode
Function mode with configurable function model through its on-board 4 i/o ports to provide riders' needs on both safety and system utilization.
Current Mode selected : Road Legal 1
Road Legal 1
Road Legal 2
Speedict eBike
Motor Start Method
Motor start method for twist-grip throttle action
6 km/h : with this option is selected, when start with twist-grip throttle without PAS movement is detected, system will govern the top speed up to 6km/h
Mode
6 km/h
Start Power
Start Power (1-100)
10
Save
Cancel
menu

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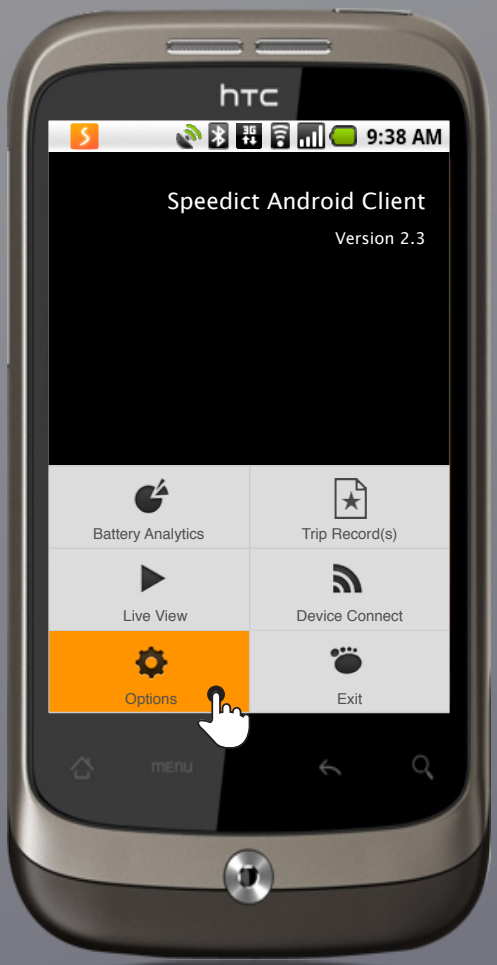
Governor

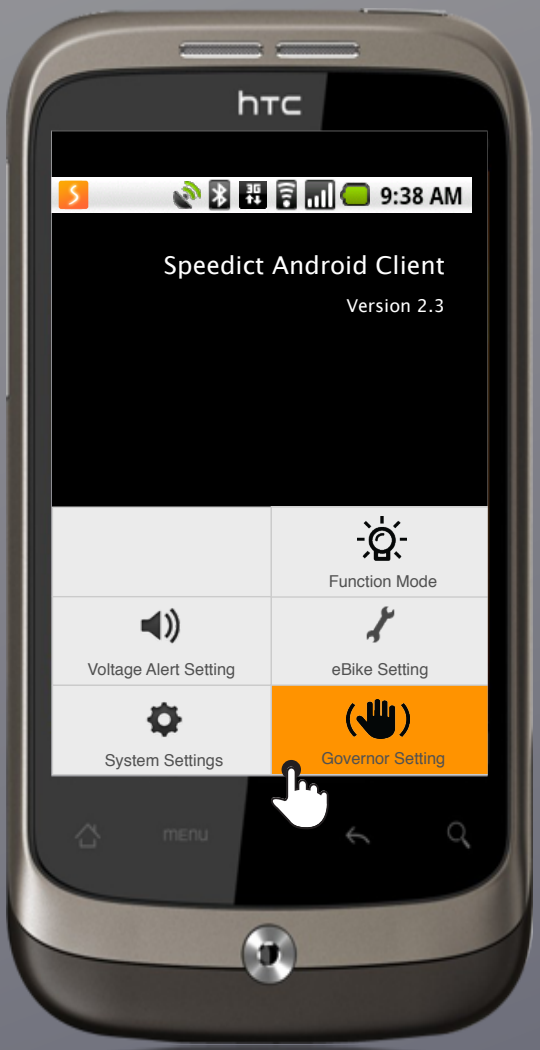
Apart from Speed and Current Throttle features, Speedict eBike provide another way to governing Speed, Temperature, Power, Voltage and Current by Governor functions.

Application Interface

Like Offline and Function Mode, Governor function work on Android platform only, for normal JAVA phone please stay on firmware 1.x for standard features.

Click on the menu button for main menu displayed as shown on right, then click on the Governor Setting button shown below for governor related settings.





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On Governor page the cutoff point of Speed, Voltage, Watt, Current and Temperature can be entered and enabled individually, click on the Save button to save the value.

SETTING	DESCRIPTION
GOVERNOR STATUS	ON/OFF TOGGLE BUTTON
ALERT	SOUND ALERT WHEN CUT-OFF POINT IS REACHED
SPEED	OVER SPEED CUT-OFF (EITHER KMH OR MPH)
VOLTAGE	UNDER VOLTAGE CUT-OFF
CURRENT	OVER CURRENT CUT-OFF
TEMPERATURE	OVER TEMPERATURE CUT-OFF (C OR F)
WATT	OVER POWER (WATT) CUT-OFF

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Caring Instruction The eBike contains no user serviceable parts inside. It does not require special care, just gentle wipe the eBike with a damp cloth if it gets dirty and it can be stored anywhere other than an extreme environment or under direct sunlight for a prolonged period of time.

Technical Support Please visit out site www.speedict.com or email us at support@speedict.com for more technical support if you are still having difficulties or have questions that aren't covered in this manual.

Warranty The eBike is guaranteed to be free from defects in materials and workmanship for a period of one (1) year starting from the date of your original purchase. Please refer to the Speedict product warranty page for detailed terms and conditions as well as procedures for warranty claims.

Changes The material in this manual is for owners' information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this manual to ensure accuracy, Speedict assumes no liability resulting from errors or omissions in this manual or from the use of information contained herein. Speedict reserves the right to make changes in the product design without reservation and without notification to users. Please check out our website www.speedict.com frequently for the latest user manual.

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